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DIVISION OF CONSUMER ADVOCACY
Department of Commerce and
Consumer Affairs
335 Merchant Street, Room 326
Honolulu, Hawaii 96813
Telephone: (808) 586-2800

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of)
HAWAIIAN ELECTRIC COMPANY, INC.)
Approval of Rate Increase and Revised Rate)
Schedules and Rules.)

DOCKET NO. 2006-0386

DIVISION OF CONSUMER ADVOCACY'S
INFORMATION REQUESTS

Pursuant to the Revised Procedural Schedule approved in Order No. 23442, the Division of Consumer Advocacy submits its **FIRST THROUGH FOURTH SUBMISSIONS OF INFORMATION REQUESTS** in the above docketed matter which were informally filed with Applicant on the following dates:

First Submission	January 23, 2007
Second Submission	January 30, 2007
Third Submission	March 29, 2007
Fourth Submission	May 9, 2007

DATED: Honolulu, Hawaii, May 25, 2007.

Respectfully submitted,

By Cheryl S. Kikuta
CHERYL S. KIKUTA
Utilities Administrator
DIVISION OF CONSUMER ADVOCACY

PUBLIC UTILITIES
COMMISSION

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DOCKET NO. 2006-0386

HAWAIIAN ELECTRIC COMPANY, INC.

FIRST SUBMISSION OF INFORMATION REQUESTS

General Information Requests

CA-IR-1

For each of the HECO witnesses who sponsor test period budgeted labor direct expense amounts, please provide the following information:

- a. Identify each employee involved in preparation of budgeted staffing and associated labor direct expense amounts included in the witnesses' portion of the rate case test period budget.
- b. Provide complete copies of all calculations, spreadsheet files, "pencil" workpapers, surveys and other analyses performed by each of the employees identified in response to part (a) above, documenting all work done to determine required staffing levels and overtime hours by Department, RA, Activity and NARUC Account.
- c. Describe the actual force level that existed at the date the budget was prepared or otherwise served as a base for purposes of preparing the budget level.
- d. For each budgeted employee position that is added to existing actual force levels (as of the date the budget was prepared), **explain** the analyses undertaken to determine

that each added position was necessary and should be filled in order to meet present or anticipated work requirements. Also, please explain how the anticipated work requirements were defined and determined.

- e. Describe and, to the extent possible, quantify the backlog of work, unfinished projects, deferred maintenance and other labor requirements unfulfilled at present staffing levels, that will be satisfied by adding the employee positions identified in your response to part (d) above.
- f. Provide complete copies of all studies, analyses, workpapers, projections, notes, correspondence, assumptions and other documents associated with your responses to parts (d) and (e) above.

CA-IR-2

For each of the HECO witnesses who sponsor test period budgeted non-labor direct expense amounts, please provide the following information:

- a. Identify each employee involved in preparation of budgeted non-labor direct expense amounts included in the rate case test period budget and sponsored by the witness.
- b. Provide complete copies of all calculations, spreadsheet files, "pencil" workpapers, surveys and other analyses performed by each of the employees identified in response

to part (a) above, indicating the amounts by Department, RA, Activity and NARUC Account that such calculations support.

- c. For each budgeted non-labor amount in the test period forecast that exceeds \$50,000, please describe the basis for determining the budgeted amount (for example, bid solicitation, price times quantity estimation, historical cost escalated, etc.)
- d. For each item in your response to part (c) above, where specific quantities and prices were discretely forecasted, explain the basis for and source of the budgeted quantity inputs and budgeted prices for each such item. Provide complete copies of all studies, reports and other documents that were relied upon.
- e. For each item in your response to part (c) above where historical costs were averaged and/or escalated, provide all historical cost information that was considered and explain how such data was evaluated and escalated to derive test year proposed levels.
- f. For each item in your response to part (c) above where a bid solicitation or other special analysis was conducted, explain what was done and provide complete copies of all supporting reports, bid solicitations, proposals, analyses,

workpapers and other documents associated with such efforts.

- g. Provide complete copies of all other information required to completely support and document the test year projected expense levels being proposed by the Company, including general assumptions and forecasting instructions that were employed.

CA-IR-3

To the extent not provided in response to CA-IR-1 or CA-IR-2, please provide complete copies of all other calculations, spreadsheet files, "pencil" workpapers, surveys, documentation and other analyses supporting each ratemaking adjustment (e.g., budget adjustments, normalizing adjustments, etc.) to projected test year expense, plant in service, accumulated depreciation, etc. being proposed by the Company, including any assumptions and adjustment instructions that were employed.

CA-IR-4

Ref. Workpapers for HECO-2301 & HECO-2302.

The spreadsheet files supporting the above referenced workpapers include "links" to spreadsheet files "PInput Curr Eff Rates.xls" and "Pinput.xls," respectively. Please provide a copy of these spreadsheet files.

DOCKET NO. 2006-0386

HAWAIIAN ELECTRIC COMPANY, INC.

SECOND SUBMISSION OF INFORMATION REQUESTS

CA-IR-5 Please provide copies of the following documents for HEI and/or HECO:

- a. 2006 Annual Report to Stockholders;
- b. 2006 Statistical Supplement to Annual Report;
- c. 2006 Form 10-K;
- d. Prospectus for most recent public offering of common stock;
- e. Prospectus for most recent public offering of long-term debt;
 and
- f. Prospectus for most recent public offering of preferred stock
 or hybrid securities.

CA-IR-6 Please provide copies of all reports prepared by rating agencies that describe HEI and/or HECO for the period 2001 to the present.

CA-IR-7 Please provide copies of all reports prepared by security analysts that describe HEI for the period 2001 to the present.

CA-IR-8 Please provide a schedule that shows the capital structures for HEI (consolidated), HECO (consolidated), HECO (Oahu only), MECO,

and HELCO for the period 2002 – 2006 and for the test period in this proceeding.

CA-IR-9 Please provide a schedule that shows the segment information for HEI for each year 2002 – 2006.

CA-IR-10 Please identify any methodological or data changes, except for the time frame of information contained in the capital structure and/or cost rates of fixed cost components, of HECO's current application.

CA-IR-11 Please provide a schedule that shows the various security ratings of HEI and HECO for each year 2002 to the present.

CA-IR-12 Please provide copies of any presentations of HEI and HECO given to security analyses and rating agencies for the period 2005 to present.

Witness T-18 Roger A. Morin

CA-IR-13 Please identify every public utility rate proceeding in which Dr. Morin has testified in since 2000 and provide the following information for each proceeding:

- a. Name of Company;
- b. Name of Jurisdiction;

- c. Docket Number;
- d. Date of Testimony;
- e. Cost of Equity Recommended; and
- f. Cost of Equity Authorized.

CA-IR-14 Please provide copies of documents cited in the following footnotes:

- a. 7;
- b. 8;
- c. 9; and
- d. 10.

CA-IR-15 Please provide a copy of the source data used in deriving the "Allowed Risk Premiums," as cited on pages 42-43.

CA-IR-16 Please indicate if Dr. Morin is aware of any academic or other studies that maintain that all investors rely exclusively on analysts' forecasts of earnings per share in making investment decisions. Please cite any such studies that maintain this and indicate specifically where in the studies such a claim is made.

CA-IR-17

Re: Statement on page 54, lines 12-13.

Please indicate if Dr. Morin is aware of any "evidence" that challenges the use of analysts' forecasts of earnings as an indicator of stock price performance and/or cost of capital estimation.

CA-IR-18

Please identify and provide copies of any analyses used by Dr. Morin in deriving the 0.25% risk adjustment he adds to the cost of equity for the average risk electric utility in order to develop a 11.25% cost of equity for HECO.

CA-IR-19

Re: Risk adjustment proposed for HECO.

Please provide the following information for each cost of equity analysis that Dr. Morin has performed over the period 2000 to the present:

- a. Average cost of equity (i.e., CAPM, Risk Premium, and DCF – as shown on page 64) for the average risk electric or natural gas utility; and
- b. Adjustment proposed for subject utility in each case.

Witness T-19 Tayne Sekimura

CA-IR-20

Please provide copies of S&P articles cited in footnote 11.

DOCKET NO. 2006-0386

HAWAIIAN ELECTRIC COMPANY, INC.

THIRD SUBMISSION OF INFORMATION REQUESTS

General Information Requests.

CA-IR-21 Please provide a complete copy of the most current available HECO management organization chart, illustrating reporting relationships among management personnel, departmental organizations and relative staffing levels within each department.

CA-IR-22 Please provide a complete copy of the most current available Hawaiian Electric Industries ("HEI") management organization chart, illustrating reporting relationships among management personnel, departmental organizations and relative staffing levels within each department, with an explanation of which departments are supportive of HECO operations and the services/activities provided.

CA-IR-23 Please provide in hard copy and electronic media a complete table of HECO and HEI Departmental and Responsibility Area ("RA") reporting structure documentation, showing RA descriptions and indicating how each department/RA is aligned with the HECO and HEI organization charts provided in response to the preceding two information requests.

CA-IR-24

Please provide a chart showing each separate legal entity within HEI and provide the following additional information:

- a. Explain and quantify the types of recurring and non-recurring affiliate transactions that took place in 2006 and 2007 (to-date) between HECO and each affiliated entity.
- b. Describe the basis of pricing each form of affiliate transaction listed in your response to part (a) of this information request, for example fully distributed cost, market price, appraised value, etc.
- c. If any affiliate service agreements exist in connection with HECO affiliate transactions, please provide complete copies of same.
- d. Identify and describe each affiliate relationship of HECO for which Hawaii PUC notification and/or approval has been sought or received.
- e. Provide complete copies of any documents associated with your response to part (d) of this information request.

CA-IR-25

Please provide complete copies of the consolidating financial statement workpapers (income statements and balance sheets) for the HEI financial statements issued publicly for calendar 2005 and calendar 2006. Include in your response the most detailed available stand-alone income statements and balance sheets for

each legal entity within HEI for each period/date, as well as details regarding elimination entries and any reclassifications made in preparing consolidated public financial statements.

CA-IR-26

Please provide a complete and detailed description of the HEI/HECO budget process and cycle, indicating the time line for each individually significant budget activity/step throughout a typical year and identifying the documents produced at each step of such process/cycle. Provide specimen copies of each type of document routinely created within the most recently completed budget cycle, including but not limited to budget assumption statements, calendars, input forms, staffing documentation, presentation graphics and budget review/approval documentation.

CA-IR-27

Please provide a detailed statement of HECO and HEI actual employee levels on a quarterly basis for each year 2005 through 2007, to-date, indicating the numbers of full-time, part-time and temporary employees in each department and RA and/or other reportable work groups and the comparable numbers of authorized, but unfilled positions of each type within each department, RA or work group.

CA-IR-28

Please provide a complete copy of the most recently completed Federal and State income tax returns for HECO, including all supporting schedules.

CA-IR-29

Please provide a complete copy of employee benefit documentation associated with each existing employee health, welfare or retirement plan, in the form currently provided to employees to advise them of such benefits.

CA-IR-30

- a. Has the Company initiated any individually significant efficiency or cost reduction programs since January 1, 2005?
- b. If affirmative, please identify and describe each such program and provide copies of all reports analyses, projections, workpapers and other documentation related to same.

CA-IR-31

Ref: HECO-WP-101(C) - Comparative Annual Expense by Block/Account/Department.

Please provide an updated version of this comparative expense summary substituting 2006 Actual (in place of 2006 Budget) data, in hard copy and electronic (excel) format.

CA-IR-32

Ref: HECO-WP-101(D) - Comparative Annual Expense by Block/Account/Department/RA/Labor-NonLabor.

Please provide an updated version of this comparative expense summary substituting 2006 Actual (in place of 2006 Budget) data, in hard copy and electronic (excel) format.

CA-IR-33

Ref: HECO-WP-101(G) - Non-Labor Projected Test Year Expenses Block/Account/Department/RA/Activity/Location/EE.

Please provide a report showing an alternative sort of Non-Labor actual expenses for the years 2002 through 2006 compared to budget 2007, using the following sort sequence: Block of Accounts/RA/Expense Element/Activity. Please provide your response in hard copy and electronic (excel) format.

CA-IR-34

Ref: HECO-WP-101(F) - Direct Labor Projected Test Year Expenses Block/Account/Department/RA/Activity/Location.

Please provide a report showing an alternative sort of Direct Labor actual expenses for the years 2002 through 2006 compared to budget 2007, using the following sort sequence: Block of Account/RA/Expense Element/Activity. Please provide your response in hard copy and electronic (excel) format.

Witness T-1 Mr. Alm.

CA-IR-35

Ref: T-1, page 27, lines 22 to 28.

- a. Is HECO using the same "O&M Expense Budget" for internal cost management monitoring purposes in 2007 that was developed and filed with the PUC for rate case purposes?
- b. If your response is anything but an unqualified "yes," please identify and describe each different type of budget that is developed in the normal course of business and explain the differences between HECO's 2007 rate case budget and each of its other 2007 internal cost management budget(s).

CA-IR-36

Ref: T-1, page 28, line 1.

Please provide complete copies of all documents developed and circulated among HECO employees to inform them of common budget assumptions to be employed in the development of the rate case projections.

CA-IR-37

Ref: T-1, page 11, line 17.

Please provide the following information regarding the referenced EPRI Solutions, Inc. ("ESI") work that is described:

- a. A complete copy of the "report" prepared and issued by ESI.
- b. A copy of the engagement letter/contract memorializing the scope and nature of ESI work and funding for same.

- c. State whether any drafts were prepared by ESI and submitted to HECO prior to finalization of the document provided in response to part (a).
- d. If your response to part (c) is affirmative, please provide complete copies of each draft report, explaining the changes that were made to such draft(s) and the reasons for such changes.

CA-IR-38

Ref: HECO-106 - Proposed Rate Schedules.

Please provide the Company's proposed rate schedules in electronic Word format, indicating by "track changes" or other editing markups each change being proposed to the existing tariffs.

CA-IR-39

Ref: HECO-108 - Proposed Table of Contents and Rule 4.

Please provide the Company's proposed rules in electronic Word format, indicating by "track changes" or other editing markups each change being proposed to the existing Table and Rule 4.

CA-IR-40

Ref: HECO-110 - Proposed Rule No. 7 Changes.

Please provide the Company's proposed Rule 7 pages in electronic Word format, indicating by "track changes" or other editing markups each change being proposed to the existing Rule 7.

CA-IR-41

Ref: HECO-102, page 1 - Balance Sheet "Regulatory Assets."

Please provide the following information regarding the Company's per book balance of "Regulatory Assets:"

- a. A detailed itemization of each item and amount within "Regulatory Assets" as of September 30, 2006 and December 31, 2006.
- b. Identify and describe each prior Hawaii PUC Decision or other authority relied upon to record each item listed in your response to part (a).
- c. Explain how each listed item is treated in your rate filing, indicating where any rate base or operating effects are recognized within filed Exhibits or Workpapers.
- d. State with specificity any amortization period or other accounting convention that is expected to control changes in the balance for each item listed in your response to part (a).

CA-IR-42

Ref: HECO-102, page 2 - Balance Sheet "Regulatory Liabilities."

Please provide the following information regarding the Company's per book balance of "Regulatory Liabilities:"

- a. A detailed itemization of each item and amount within "Regulatory Liabilities" as of September 30, 2006 and at December 31, 2006.

- b. Identify and describe each prior Hawaii PUC Decision or other authority relied upon to record each item listed in your response to part (a).
- c. Explain how each listed item is treated in your rate filing, indicating where any rate base or operating effects are recognized within filed Exhibits or Workpapers.
- d. State with specificity any amortization period or other accounting convention that is expected to control changes in the balance for each item listed in your response to part (a).

CA-IR-43

Ref: T-1, page 29, line 23 - Eliminated Costs; HECO-104, pages 24 to 29 - Executive Compensation.

Please provide a detailed itemization of any amounts of HEI-allocated or HECO directly-incurred expenses associated with the listed (on page 24 of HECO-104) Executive Salary, Executive Bonus, Restricted Stock, Options, Stock Appreciation Rights, LTIP or any other stock-based compensation program that were not eliminated by the company in preparing its rate filing.

Witness T-2 Mr. Willoughby.

CA-IR-44

Ref: HECO-WP-201 - "HECO August 2006 Sales Forecast."

Please provide a complete copy of the most detailed available documentation in support of this forecast, including but not limited to Forecast Planning Committee Reports, Energy Services Analysis

reports, data tables, alternative scenarios and economic outlook documentation that was relied upon.

CA-IR-45

Ref: HECO-204, HECO-205, HECO-207, HECO-208, HECO-209, HECO-210 and HECO-211.

For each of the referenced Exhibits, please provide the following information:

- a. An updated data table and graph including actual 2006 data in place of the 2006 forecasted information.
- b. Actual cooling degree day ("CDD") data for each year.
- c. Provide Weather Normalized Use/Average Customer and Billed Sales in each actual year 1995 through 2006.
- d. Provide the calculation algorithms employed to determine the response to part (c) of this information request in each year.

CA-IR-46

Ref: HECO T-2, page 3, line 4 and line 10.

Please provide the following information regarding HECO's annual sales forecast and quarterly updates procedure:

- a. A complete copy of the most recent "annual sales forecast," if any updates have been prepared after August 2006.
- b. A complete copy of the most recent "quarterly sales update," as referenced at line 10.

CA-IR-47

Ref: HECO-WP-201, page 28 "Comparison of Recorded vs. Report 1 Forecast"

Please provide a complete copy of monthly Report 1 documents for each available month of 2006 and 2007 to-date, indicating which forecast (e.g., May 2005, etc.) was used as the basis for Report 1 tracking and financial reporting purposes.

CA-IR-48

Ref: HECO-WP-202, pages 1 and 2 (Monthly Cooling Degree Days and Wet Bulb Temperatures).

Please provide the following information:

- a. Updated data tables showing CDDs and Wetbulb temperatures for the remaining months of 2006 and all available months of 2007, in excel electronic format.
- b. Explain whether HECO believes any trend in cooling degree days or temperatures exists for Oahu, as part of the widely reported global warming phenomena.
- c. Provide all available information supportive of the statement by T-2 at page 12, "Honolulu weather appeared to experience weather in 2004-2006 anomalous relative to previous years."
- d. Describe activities undertaken by or for HECO to evaluate weather patterns and trends, including all work supportive of the decision to employ 1997-2003 average wet bulb

temperatures and cooling degree days as indicative of normal weather (see T-2, page 13, lines 3-6).

- e. Provide complete copies of all documents associated with the responses to parts (a) through (d) of this information request.

CA-IR-49

Ref: HECO Response to CA-IR-12; May 2006 Rating Agency Meetings, Page A-7, (Top 25 Customers on Oahu MWH Sold).

Please provide the following information regarding HECO sales to the top 25 customers:

- a. An updated schedule of actual MWH sales data adding a 2006 actual column and a year-to-date sales through March 2007 column for each top 25 listed customer.
- b. Provide test year projected sales to each listed top 25 customer account, to the extent available.
- c. Explain known causes for any significant fluctuations in actual sales to individual listed customers in the data provided in the response to parts (a) and (b) of this information request.

Witness T-3 Mr. Young.

CA-IR-50

Ref: T-3, page 4, lines 7 to 11 - Rider Revenue Calculations.

Mr. Young describes in testimony how customers on rate riders were evaluated to develop test year revenue estimates. Please

provide complete copies of individual rider customer billing data and other documentation relied upon to derive inputs to the various WP-301 electronic spreadsheet files used to price out the rate rider revenue adjustments.

CA-IR-51

Ref: T-3, page 5, lines 5 to 8 - (Schedule R Inclining Blocks).

Please provide complete copies of all source data, studies and spreadsheet files (excel format) underlying the determination of test year sales and revenues within each block of proposed Schedule R rates. In addition please explain and provide documentation for each assumption made to allocate sales among rate blocks or to otherwise adjust billing determinants.

CA-IR-52

Ref: T-3 - (Schedule R Minimum Charges).

Please explain whether or not HECO is proposing any changes to the Schedule R minimum monthly charges, comparable to the pending HELCO rate case proposal, and provide a detailed explanation of why such a change is or is not viewed as appropriate for Oahu, and explain the reasons for any different approach to this issue for HECO versus HELCO.

Witness T-4 Mr. R. H. Sakuda.

CA-IR-53

Ref: T-4, page 10, lines 25 – 22, page 11, lines 1 – 24 and page 12, lines 1 - 9, HECO 402.

- a. Please provide actual fuel prices for industrial fuel oil and diesel oil by month, since January 1, 2006.
- b. Please provide excerpts of pricing provisions for both industrial fuel oil and diesel fuel pursuant to the Chevron and Tesoro fuel contracts, as well as illustrative calculations, input value documentation and supporting market price or index documentation for the Company's determination of test year unit prices. Please include taxes, ocean transportation, land transportation, petroleum terminalling and wharfage costs that are included to determine the delivered-to-plant price.
- c. Please provide a copy of confidential Exhibit HECO 402.

CA-IR-54

Ref: T-4.

- a. For the P-MONTH Production Simulation Model, please provide for the test year period, in electronic spreadsheet format and hard copy format the input data for the following:
 1. total energy and hourly load of the HECO electric system;
 2. energy and hourly load to be served by the HECO firm and non-firm generating units;

3. energy and hourly load to be served by firm and non-firm purchased power producers;
4. please indicate which units in the model are on AGC;
5. please provide the minimum run time for each individual generating unit used by HECO, including purchased power; and
6. operating constraints such as must-run units and minimum energy purchases from purchased power producers.

CA-IR-55

Ref: T-4.

Please provide all other input data files for the P-MONTH Production Simulation Model, for the test year period, in electronic format and hard copy that were not included in responses to the previous information request.

CA-IR-56

Ref: T-4.

Please provide the energy generated by Generating Unit by month for 2005, 2006 and 2007 year-to-date.

CA-IR-57

Ref: T-4.

Please provide actual monthly and annual heat rates, gross and net generation for each generating unit for the years 2004, 2005, 2006 and 2007 year-to-date.

CA-IR-58

Ref: T-4.

Please provide in electronic spreadsheet format and hard copy format the hourly output of P-MONTH Production Simulation Model for each HECO unit, including purchased power.

CA-IR-59

Ref: T-4.

Is the Company intending to update the Production Simulation inputs using 2006 generating information? If so, what does the Company intend to update and when will the Company provide updated Production Simulation Results?

CA-IR-60

Ref: HECO 403, WP-403, page 2.

Please provide a copy of any energy Loss Studies and other supporting documentation that support the energy losses shown in the referenced exhibit and workpaper.

CA-IR-61

Ref: HECO-WP-404, Page 5.

- a. Please explain any tests or related data that was used to develop the Heat Rate Constants for each unit.
- b. Please provide copies of all workpapers, analyses and source documents that support this information. The workpapers and analysis should set forth all computations, state all assumptions made in performing such calculations, and explain the basis for such assumptions.

Witness T-6 Mr. A. Giovanni.

CA-IR-62

Ref: HECO T-6, page 9 – EAF and EFOR Performance.

Please provide comparative calculations of HECO equivalent availability factor "EAF" and equivalent forced outage rate "EFOR" for the calendar years 2001 through 2006. Provide all data in hard copy and electronic (excel) format.

CA-IR-63

Ref: HECO T-6, page 14 – Changes in Operating Duty.

In testimony, Mr. Giovanni references changes in the way HECO generating units have been utilized. Please provide the following information on a comparable basis for each HECO-owned steam and combustion turbine unit for the years 2000 through 2006. Provide all data in hard copy and electronic (excel) format:

- a. Capacity factor (annual basis).

- b. Number of starts.
- c. Total operating hours.

CA-IR-64

Ref: HECO T-6, page 17, line 13 – Normal Overhaul Year.

According to Mr. Giovanni, "The 2007 test year planned maintenance Schedule shown in HECO-608 generally represents a normal overhaul year..." Please explain how this was determined and provide detailed supporting workpapers, calculations and all other data relied upon to make this determination.

CA-IR-65

Ref: HECO T-6, page 25, line 9 – Staffing Needs.

According to the testimony, "...we need to be able to carry out our staffing and training plans, so that we will have the staffing assets necessary to effectively perform the reliability programs and initiatives discussed in our 2005 rate case testimonies and information responses and in the 2006 ESI study." Please provide complete copies of all available studies, reports, workpapers, analyses, projections, work backlog records and other information relied upon to conclude that existing staffing levels in 2006 and non-labor expense levels incurred in 2006 are not sufficient to effectively perform the reliability programs and initiatives discussed in our 2005 rate case testimonies and information responses and in the 2006 ESI study.

CA-IR-66

Ref: HECO T-6, page 26; HECO-614 - Staffing Plans.

Please state with specificity how the staffing plan and timing of hires in HECO-614 was determined, indicating the criteria and metrics used to identify each position to be filled and the date it should be filled. Provide complete copies of all studies, reports, workpapers, analyses, projections, work backlog records and other information relied upon to conclude that this specific plan is optimal, necessary and cost effective in relation to quantified measures of work requirements.

CA-IR-67

Ref: HECO T-6, page 27, line 14 – Vacant Positions “Analysis.”

Please provide a complete copy of the referenced “analysis” that was performed, including a statement of all assumptions and detailed supporting calculations for this analysis. Provide all data in hard copy and electronic (excel) format.

CA-IR-68

Ref: HECO T-6, page 28, line 6 – PS Engineering, PS Environmental, PS Services Qualitative Vacant Positions “Analysis.”

Please provide a complete copy of the referenced “analysis” that was performed, including a statement of all assumptions and detailed supporting calculations for this analysis. Provide all data in hard copy and electronic (excel) format.

CA-IR-69

Ref: HECO T-6, page 32, line 3 - Targeted Compensation Program.

According to the testimony, "HECO recently introduced a targeted compensation program whose objective is to recruit and retain those in critical utility engineering positions." Please provide the following information with respect to this program:

- a. Provide the most detailed available written description of the "program."
- b. Identify and quantify each specific change in salary rate by position that has been implemented.
- c. Explain and quantify how amounts in your response to part (b) have been recognized in the Company's rate filing.
- d. What is the total incremental cost in the test year associated with the implementation of this program?

CA-IR-70

Ref: HECO T-6, page 32, line 14 - Reduced Staffing Impacts.

According to the testimony, "Due to the reduced level of staffing in 2006, some work was contracted to outside consultants. Also, based on an ongoing and iterative prioritization process, lower priority projects were deferred. This is reflected by a decrease in the overall Power supply capital expenditures spending in 2006." Please provide the following information with respect to this statement:

- a. A detailed schedule comparing the amounts of actual "outside services" costs chargeable to Production O&M accounts in each year 2003, 2004, 2005, 2006 to the projected 2007 test period amount, by Account, RA, activity and amount.
- b. Explain how the amounts provided in response to part (a) of this information request reflect the impacts of "reduced staffing levels" in 2006.
- c. Explain how the amounts provided in response to part (a) of this information request reflect the impacts of substantially increased staffing levels included in the test year.
- d. Provide a detailed schedule comparing actual year-end "prioritized projects" listings as of December 31, 2003, December 2004, December 2005 and December 2006; indicating which lower priority projects were in deferred status at the end of each year.
- e. Explain how the amounts provided in response to part (d) of this information request reflect the impacts of "reduced staffing levels" in 2006.
- f. Explain how the amounts provided in response to part (d) of this information request reflect the impacts of substantially increased staffing levels included in the test year, with reference to the projected 2007 test period prioritized project

listings, indicating which specific previously deferred projects are now projected to be funded and completed in the test year.

CA-IR-71

Ref: HECO T-6, page 40, line 16; PSO&M Reorganization.

According to the testimony, the PSO&M Department, "was reorganized in June 2006." Please provide the following information with respect to this statement:

- a. State and describe the deficiencies or problems that existed with respect to the previous organization, identifying how the changes described in HECO-615 and on T-6, page 41 will be responsive to each deficiency/problem.
- b. Provide copies of all studies, reports, analyses, workpaper and other documents associated with the reorganization, other than the ESI study report (referenced in HECO-607) that was separately requested by the Consumer Advocate.

CA-IR-72

Ref: HECO T-6, page 44 - Production Operations Positions by Power Plant Table.

The table presented at the top of page 44 presents a staffing plan for each Power Plant. Please provide the following information with respect to this data:

- a. Actual staffing levels by position for each calendar quarter of 2004, 2005, 2006 and 2007, to-date.

- b. Actual incurred straight time and overtime labor hours for each labor category (each line item) for each calendar quarter of 2004, 2005, 2006 and comparable hours data included in the Company's test year 2007 rate base forecast.
- c. To the extent historical quarterly actual staffing levels in your response to part (a) of this information request are significantly below the desired staffing indicated in the table at T-6, page 44, please explain and quantify whether staffing shortages were "made up" by expanded overtime, with reference to the information in your response to part (b) where such hours can be observed.
- d. To the extent historical quarterly actual staffing levels in your response to part (a) of this information request are significantly below the desired staffing indicated in the table at T-6, page 44, and staffing shortages were not "made up" by expanded overtime, please explain and quantify whether work levels were significantly different historically.
- e. To the extent historical actual quarterly labor hours in your response to part (b) of this information request are significantly below the Company's projected test year straight time and overtime labor hours, please explain and quantify the amounts of any contract labor or outside

services in each quarter that was required to "make up" for staffing shortages.

- f. If your response to part (e) of this information request is that no identifiable contract labor or outside services were required to make up for labor shortfalls, please explain and quantify whether work levels were significantly different historically.

CA-IR-73

Ref: HECO T-6, page 45, line 16, HECO-616 - Operator Vacancies.

According to the testimony, "It is possible to operate all the steam electric units on a 24 X 7 basis without having a full complement of 156 operating, however, this is only possible by existing personnel working excessive overtime, deferring training, deferring vacation, or combinations of these factors." Please provide the following:

- a. Explain whether or not a "full complement" of 156 operators has been forecasted for the test year, as implied by the statement at line 25.
- b. Explain whether overtime for the projected level of Operations personnel is forecasted at 40,639 hours, as stated at line 25.
- c. State whether "excessive overtime" has been worked in 2005 or 2006 and whether the amounts shown on

HECO-616 are believed to quantify hours that are "excessive."

- d. According to line 22 of the testimony, historical actual staffing average 145 operators in 2005 and 2006. Was the overtime shown on HECO-616 incurred at these lower staffing levels?
- e. Please explain why forecasted increased staffing of 11 positions, from 145 historical average operator positions in 2005 and 2006 to 156 projected positions in the test year, does not "save" at least 17,000 hours of historical overtime (if new employees work at least 1,550 annual productive hours annually), instead of only 6,281 hours or 5,315 hours as implied by HECO-616, as quoted by T-6 at page 45, lines 23 and 25.
- f. Provide complete copies of all studies, analyses, workpapers and other documents supportive of your response to part (d) of this information request.

CA-IR-74

Ref: HECO T-6, page 47, line 19 - Production Maintenance Staffing.

According to the testimony, "As shown in HECO-614, there are a total of 161 staff positions, consisting of 13 supervisory and clerical, and 148 trades and crafts positions." Please provide the following:

- {
- a. Provide a table of planned Production Maintenance staffing by Power Station and for the Traveling personnel, in the format of the table at page 44 for Operations personnel.
 - b. Provide comparable actual staffing levels by position for each calendar quarter of 2004, 2005, 2006 and 2007, to-date (in the format of the table requested in part (a) of this information request).
 - c. In the same format as the table requested in part (a) of this information request, please provide actual incurred straight time and overtime labor hours for each labor category (each line item) for each calendar quarter of 2004, 2005, 2006 and comparable hours data included in the Company's test year 2007 rate base forecast.
 - d. To the extent historical quarterly actual maintenance staffing levels in your response to part (b) of this information request are significantly below the desired staffing indicated in the table provided in response to part (a), please explain and quantify whether historical staffing shortages were "made up" by expanded overtime, with reference to the information in your response to part (c) where such hours can be observed.
 - e. To the extent historical quarterly actual staffing levels in your response to part (b) of this information request are
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significantly below the desired staffing indicated in the table in your response to part (a), and staffing shortages were not "made up" by expanded overtime, please explain and quantify whether work levels were significantly different historically.

- f. To the extent historical actual quarterly labor hours in your response to part (c) of this information request are significantly below the Company's projected test year straight time and overtime labor hours, please explain and quantify the amounts of any contract labor or outside services in each quarter that was required to "make up" for staffing shortages.
- g. If your response to part (f) of this information request is that no identifiable contract labor or outside services were required to make up for maintenance labor shortfalls, please explain and quantify whether work levels were significantly different historically.

CA-IR-75

Ref: HECO T-6, page 50, line 11, HECO-619, HECO-620 – Effect of Maintenance Vacancies.

- a. Please explain whether all of the 31 vacancies that existed (some months more and some months less during 2005 and 2006) are assumed to be filled throughout the 2007 test year.

- b. Does HECO-620 accurately reflect an expectation that Maintenance Division Overtime hours in the 2007 test year are expected to be higher than actual 2005 levels by 2,096 hours and lower than actual 2006 levels by 4,001 hours?
- c. Please explain and reconcile the staffing increases stated in your response to part (a) of this information request, reconciling the new productive hours associated with added employees to the savings of overtime, relative to historical levels (as referenced in part b).
- d. If the increased staffing for maintenance is not anticipated to reduce historical overtime levels materially, please state with specificity and quantify what additional work is to be done in 2007 that was not done historically.
- e. Does HECO-619 accurately reflect an expectation that Maintenance Division Outside Service expenses in the 2007 test year are expected to be only slightly lower than actual 2005 levels and actual 2006 levels, as reflected on the "Maint Actual" lines?
- f. If the increased staffing for maintenance is not anticipated to reduce historical outside services expense levels materially, please state with specificity and quantify what additional work is to be done in 2007 that was not done historically.

CA-IR-76

Ref: HECO T-6, page 52, lines 4 to 15 - Deferred Maintenance in 2005 and 2006.

- a. Please identify which of the maintenance projects listed in the table of projects "not performed" in 2005 and 2006 are included in test year proposed expenses.
- b. In addition, please list and describe any maintenance projects that were not performed in previous years that will remain in backlog status at the end of 2007 because expenses were not included in the test year forecast.

CA-IR-77

Ref: HECO T-6, page 52 - Maintenance Backlog Listing.

- a. Please provide a complete listing of backlog maintenance work orders as of May 2006, indicating the estimated expense and capital amounts for each work order and its priority level.
- b. Provide information comparable to the listing in the response to part (a) of this information request, updated to actual backlog status as of December 31, 2006.
- c. Provide notations on the backlog listing provided in your response to part (b) of this information request, indicating by project "the expectation that the backlog will be reduced significantly when the Maintenance Division work force is at its full complement." (T-6, page 53, line 4).

Ref: HECO T-6, pages 53 to 54 - PSO&M Planning/Engineering Staffing Table.

The table starting at the bottom of page 53 presents a staffing plan for Production Planning and Engineering personnel. Please provide the following information with respect to this data:

- a. Actual staffing levels by position for each calendar quarter of 2004, 2005, 2006 and 2007, to-date.
- b. Actual incurred straight time and overtime labor hours for each labor category (each line item) for each calendar quarter of 2004, 2005, 2006 and comparable hours data included in the Company's test year 2007 rate base forecast.
- c. To the extent historical quarterly actual staffing levels in the response to part (a) of this information request are significantly below the desired staffing indicated in the table at T-6, pages 53-54, please explain and quantify whether staffing shortages were "made up" by expanded overtime, with reference to the information in your response to part (b) where such hours can be observed.
- d. To the extent historical quarterly actual staffing levels in the response to part (a) of this information request are significantly below the desired staffing indicated in the table at T-6, pages 53-54, and staffing shortages were not "made up" by expanded overtime, please explain and quantify whether work levels were significantly different historically.

- e. To the extent historical actual quarterly labor hours in the response to part (b) of this information request are significantly below the Company's projected test year straight time and overtime labor hours, please explain and quantify the amounts of any contract labor or outside services in each quarter that was required to "make up" for staffing shortages.
- f. If your response to part (e) of this information request is that no identifiable contract labor or outside services were required to make up for labor shortfalls, please explain and quantify whether work levels were significantly different historically.

CA-IR-79

Ref: HECO-621 - Training Expenses.

- a. Please provide a breakdown of the actual historical training expenses in each year from 2001 through 2005, by Account and RA.
- b. Provide updated training expenses by account and RA for 2006 and explain how such expense amounts were impacted by difficulties encountered in hiring planned new personnel.

CA-IR-80

Ref: HECO T-6, page 72 - R&D Activity Listing.

The referenced testimony provides an itemization of major R&D activity for the test year. Please provide the following information:

- a. Comparable historical actual R&D spending charged to Production O&M in each prior year, 2001 through 2006.
- b. Please explain changes in historical R&D expenditure levels, with reference to the data provided in the response to part (a) of this information request.
- c. State all reasons for any significant increase in projected R&D spending the test period, relative to historical actual spending levels.

CA-IR-81

Ref: HECO T-6, page 80 - Smart Signal.

- a. Please provide a complete copy of all economic feasibility, cost/benefit and other analyses associated with or relied upon by HECO to decide to invest in Smart Signal.
- b. Identify and provide estimated quantification for all benefits expected to be realized by HECO as a result of Smart Signal implementation.
- c. State whether and where any of the benefits stated in the response to part (b) of this data request have been reflected within estimated test period revenue requirements.

CA-IR-82

Ref: CA-IR-2, HECO T-6, Attachment 7 - Emission Fees.

Please provide the following information regarding test year proposed Emission Fees:

- a. Provide a copy of the Company's most recent emission fee calculations and filing with the DOH Clean Air Branch in electronic format.
- b. Provide a history of annual calculated fees, fees actually paid and fees waived in each of the last 10 years.
- c. Explain the basis for the +5.0% contingency added at Attachment 7B, page 13.

CA-IR-83

Ref: CA-IR-1, T-6 - Labor Spreadsheet Calculations.

- a. Please identify and explain which RA groups with labor charges to Production O&M Accounts prepared their labor hour input values or conducted labor leveling analyses using excel spreadsheets.
- b. Please provide excel format files for each of the items identified in the response to part (a) of this information request, in place of the pdf file format previously supplied.

CA-IR-84

Ref: CA-IR-2, T-6 - Non-Labor Spreadsheet Calculations.

- a. Please identify and explain which RA groups with non-labor charges to Production O&M Accounts prepared their non-labor expense input values using excel spreadsheets.
- b. Please provide excel format files for each of the items identified in your response to part (a) of this information request, in place of the pdf file format previously supplied.

Witness T-7 Mr. R. Young.

CA-IR-85

Ref: HECO T-7, pages 6 to 8, HECO-727 and HECO-734 - (O&M Corrections).

The referenced testimony describes HECO's discovery, in late 2005, that certain labor and non-labor costs had been incorrectly charged as capital work during 1999 through 2005.

Please provide the following:

- a. When in late 2005 was this discovery made? Please explain.
- b. When was the extensive research effort completed that resulted in the quantification of the correction to capital and O&M that was recorded in 2005?
- c. Please describe the nature of the events that lead to the Company's discovery of this over-capitalization error.

- d. Please identify and describe the specific accounting processes or record keeping errors that resulted in the over-capitalization.
- e. Please provide the procedures that were implemented in 2005 to prevent this problem from reoccurring.

CA-IR-86

Ref: HECO T-7, pages 6 to 8, HECO-727 and HECO-734 - (O&M Corrections).

Referring to page 6, about \$3.4 million were reclassified from capital accounts to O&M in 2005, of which about \$3 million related to years 1999 through 2004. As part of the correction, HECO also recorded adjustments to capital accounts, AFUDC and depreciation. Please provide the following:

- a. Please provide a complete copy of any studies or analyses prepared by, or for, HECO with regard to the identification and correction of the Company's accounting records.
- b. Please provide the 2005 adjustments to T&D O&M expense, capital accounts and depreciation by NARUC account.
- c. In HECO's 2005 test year rate case, was rate base adjusted (i.e., plant in service, accumulated depreciation, etc.) to recognize the affect of these corrections in the quantification of overall revenue requirement? Please explain and provide a specific reference to the information relied upon by the Company in responding to this request for information.

CA-IR-87

Ref: HECO T-7, pages 7 to 8 - (O&M Corrections).

Beginning at line 18 of page 7, HECO T-7 indicates that, once a work order adjustment was determined to be necessary in late 2005, the Company undertook an effort to manage certain costs (primarily overtime expense) to reduce the effect of the reclassification adjustment on 2005 O&M expense, without impacting service to customers. Please provide the following:

- a. Please identify and describe each temporary measure undertaken by HECO to "manage the O&M workload by prioritizing the work that needed to be completed in 2005."
- b. Referring to part (a) above, please identify and discuss whether these temporary measures resulted in the deferral of some O&M work from 2005 that would have otherwise been completed in 2005.
- c. Referring to part (b) above, please discuss whether any deferred workload was completed in 2006 or is scheduled for completion in 2007. Please explain.
- d. Please provide a quantification of the O&M reductions realized in 2005 as a result of these temporary measures.

CA-IR-88

Ref: HECO T&D Exhibits - (2006 Actuals).

Please update the following exhibits to incorporate actual 2006 values:

- a. HECO-707, HECO-710, and HECO-712 (O&M expense).
- b. HECO-717 (T&D plant).
- c. HECO-725 (Staffing).
- d. HECO-731 and HECO-732 (Vegetation management).
- e. HECO-736 (T&D program expenses).

CA-IR-89

Ref: HECO T-7, pages 8 to 10 - (T&D Work Requirements).

Beginning at page 8, line 15, HECO T-7 describes how the 2007 test year estimate of T&D expense was determined, including a discussion of the level of work (i.e., work requirements):

This level of work is based on a combination of inspection cycles, units of work, number of operations (i.e., the amount of times the equipment operated), historical trends, and is budgeted by staff with working knowledge of the maintenance requirements for HECO's facilities and the operation of the electrical system. Starting with the available labor resources (i.e., the staffing level) each RA then allocates the labor man-hours to the planned work and non-labor costs to activities corresponding to the operation or maintenance work that has been planned for the year. Each department also forecasts the non-labor costs for the level of work planned for the year.

Please provide the following:

- a. Please provide a descriptive listing of each work requirement (e.g., inspection cycles, number of inspections, number of times equipment is operated, etc.) relied upon in developing the 2007 forecast.

- b. Referring to part (a) above, please explain and provide the quantitative value assigned or attributed to each work requirement for purposes of the 2007 test year forecast.
- c. To the extent that the 2007 test year forecast is based on historical trends in work requirements, please provide the quantitative value assigned or attributed to each work requirement identified in part (a) above for each historical year.
- d. Once the planned work was quantitatively determined for the 2007 forecast test year, please explain how HECO determined the labor hours allocated to such planned work.
- e. Once the planned work was quantitatively determined for the 2007 forecast test year, please explain how HECO determined the non-labor costs attributed to such planned work.
- f. Referring to parts (b) through (e) above, please provide a copy of any workpapers or other supporting documents in both hard copy and spreadsheet file formats, with intact cell formulae.

CA-IR-90

Ref: HECO T-7, page 11 and HECO-WP-705 - (T&D O&M Expense Variances).

HELCO-WP-705 provides a comparison and explanation of test year T&D O&M expense variances in excess of \$200,000 and 10%.

However, a footnote on HELCO-WP-705, pages 1 and 2, indicates that the 2005 recorded amounts were not adjusted to remove the prior year charges to T&D O&M in 2005, resulting from the capitalization correction. Referring to HELCO-734, the \$3 million of work order adjustments relating to 1999-2004 is about 10.9% of the 2005 recorded T&D O&M expense (\$27.8 million), absent the prior year amounts. Please provide the following:

- a. Please revise HELCO-WP-705, pages 1 and 2, to show all T&D O&M variances over \$200,000 or 10%, after restating 2005 recorded amounts to exclude the prior year corrections.
- b. Please revise HELCO-WP-705, pages 3 and 4, to correspond with the revised variances supplied in response to part (a) above.

CA-IR-91

Ref: HECO T-7, page 11, HECO-735 and HECO-736 - (T&D O&M Project Variances).

A footnote on the referenced exhibits indicate that the 2005 recorded amounts were not adjusted to remove the charges to T&D O&M in 2005, resulting from the capitalization correction, related to prior years. Please revise HECO-735 and HECO-736 to remove the prior year amounts from the recorded 2005 expenses.

CA-IR-92

Ref: HECO T-7, page 14 and HECO-710 - (Transmission Operations Expense).

At page 14, lines 19 to 23, HECO T-7 identifies three (3) factors contributing to the \$1,407,000 increase in Transmission operations expense, comparing 2007 to 2005. Please provide a quantification of the portion of the \$1,407,000 associated with each of the identified items.

CA-IR-93

Ref: HECO T-7, page 15 and HECO-710 - (Transmission Maintenance Expense).

Beginning at page 15, line 19, HECO T-7 identifies seven (7) factors contributing to the \$1,400,000 increase in Transmission maintenance expense, comparing 2007 to 2005. Please provide a quantification of the portion of the \$1,400,000 associated with each of the identified items.

CA-IR-94

Ref: HECO T-7, page 16 - (Transmission Maintenance Expense).

At lines 6-21, HECO T-7 discusses the reclassification of labor charges from capital to O&M in the 2007 test year forecast due to the completion of the new EMS and new Dispatch Center capital project. Seven employees, primarily from the Operating Engineering group in System Operations, spent a majority of their time supporting and implementing the new EMS, which caused

O&M expense to have been historically lower. Please provide the following:

- a. Please identify the employees by name, department and title that were tasked to support EMS.
- b. Referring to part (a) above, when did the assignment to EMS begin and end for each employee?
- c. Referring to part (a) above, please describe the normal duties and job responsibilities of each individual within their originating organization.
- d. During the period of time that these individuals were assigned to the EMS project, please explain how their normal duties and responsibilities were met (e.g., contract employees, temporary employees, outside contractors, employee overtime, hiring additional personnel, etc.).
- e. Referring to part (d) above, did HECO incur any incremental O&M costs as a result of these individuals being assigned to the EMS project? Please identify, describe and quantify any such costs.
- f. Referring to part (e) above, have these additional costs been excluded from the 2007 test year forecast? Please explain.

CA-IR-95

Ref: HECO T-7, page 17 and HECO-712 - (Distribution Operations Expense).

Beginning at page 17, line 22, HECO T-7 identifies three (3) factors contributing to the \$1,857,000 increase in Distribution operations expense, comparing 2007 to 2005. Please provide a quantification of the portion of this increase associated with each of the identified items.

CA-IR-96

Ref: HECO T-7, page 18 and HECO-712 - (Distribution Maintenance Expense).

Beginning at page 18, line 23, HECO T-7 identifies five (5) factors contributing to the \$2,706,000 increase in Distribution maintenance expense, comparing 2007 to 2005. Please provide a quantification of the portion of this increase associated with each of the identified items.

CA-IR-97

Ref: HECO-710 and HECO-712 - (T&D O&M).

The referenced exhibits compare actual T&D O&M expense during 2001-2005 with the 2006 operating budget and the 2007 test year estimate. Please provide HECO's T&D expense budget for calendar years 2004 and 2005, in a summary format somewhat comparable to the HECO-710 and HECO-712, but providing a further breakdown between labor and non-labor expense.

CA-IR-98

Ref: HECO-731 and HECO-732 - (Vegetation Management).

Please provide a monthly breakdown of the actual vegetation management costs, set forth on the referenced exhibits, for calendar years 2004, 2005 and 2006.

CA-IR-99

Ref: HECO-731 and HECO-732 - (Vegetation Management).

Please provide the vegetation management costs projected for calendar years 2004 and 2005 in a similar format, by month if available.

CA-IR-100

Ref: HECO-725 - (T&D Staffing).

HECO-725 provides T&D staffing levels at the end of each identified period (2004, 2005, September 2006, 2006 Projected and 2007 test year estimate). Please provide the following:

- a. Please provide actual monthly staffing levels for calendar years 2004, 2005, 2006 and 2007, to-date, with a further breakdown of each listed department by RA.
- b. Please provide a monthly breakdown of the 2006 projected staffing levels, with a further breakdown of each listed department by RA.
- c. Please provide a monthly breakdown of the 2007 test year forecast staffing levels, consistent with the monthly counts

HECO seeks to include in setting rates, with a further breakdown of each listed department by RA.

- d. Referring to part (a) above, please supplement the 2007 actual staffing levels as additionally monthly data becomes available.

CA-IR-101

Ref: HECO T-7, pages 30 to 33, HECO-731 and HECO-732 - (Vegetation Management).

During the period 2000-2006, were any vegetation management studies, analyses or status evaluations conducted by, or for, HECO?

- a. If so, please provide the following:
1. Please identify and describe the basis for and objective of each study.
 2. Please provide a copy of each identified study.
- b. If not, please provide the following:
1. When was the most recent vegetation management study conducted by, or for, the Company?
 2. Referring to part (b)(1), please provide a copy of such study.
 3. Please explain why a similar study was not prepared for purposes of assisting HECO in evaluating the need for and magnitude of the proposed revisions to the 2007 vegetation management program.

CA-IR-102

Ref: HECO T-7, pages 30 to 33, HECO-730 - (Vegetation Management).

During the period 2000 to 2006, please provide a general explanation of the extent and nature of the Company's vegetation management program including, but not necessarily limited to, the following items:

- a. How the program has changed? Please explain.
- b. Whether HECO consistently followed a 15-month trimming cycle. Please explain.
- c. The number of "work units (trees)" the Company trimmed or removed each calendar year.
- d. The average volume of vegetation removed per "work unit" each calendar year, providing all calculations in a spreadsheet file format with intact calculations and algorithms.
- e. The average time or duration required to trim a "work unit" in each calendar year, providing all calculations in a spreadsheet file format with intact calculations and algorithms.

CA-IR-103

Ref: HECO T-7, pages 30 to 33, HECO-731 and HECO-732 - (Vegetation Management).

In a format comparable to the two referenced HECO exhibits, please provide the amount of vegetation management program

O&M expenses included in overall revenue requirement in HECO's 2005 rate cast test year.

CA-IR-104

Ref: HECO T-7, page 43 and HECO-725 - (T&D Labor).

Please provide the following:

- a. Please provide actual incurred straight time and overtime labor hours for each T&D department RA labor category for calendar years 2004, 2005 and 2006, as well as the comparable labor hour data included in the Company's 2007 test year rate case forecast. [Note: This request seeks total labor hours, not any allocation between O&M and capital accounts.]
- b. For each RA listed in response to part (a) above, please provide the actual composite O&M/capital ratios in calendar years 2004, 2005 and 2006 as well as the comparable O&M/capital ratio included in the Company's 2007 test year rate case forecast.

CA-IR-105

Ref: HECO T-7, pages 20 to 23 - (EMS Project).

The referenced testimony discusses the Siemens Energy Management System (EMS) project that replaced the old Rockwell EMS. Please provide the following:

- a. When was the new Siemens EMS project started?

- b. When was the new Siemens EMS project completed?
- c. Is the cost of the new Siemens EMS project included in rate base?
 - 1. If so, please provide gross plant and related depreciation reserve balance at the beginning and end of the 2007 test year forecast.
 - 2. If not, why not?
- d. How does the final cost (or the current estimate of the final cost, if not yet complete) of the Siemens EMS project compare to the cost forecast presented to the Commission in Docket No. 03-0360? Please explain and provide the referenced amounts.
- e. Please provide a copy of all documentation and spreadsheet files supporting the \$557,000 estimated annual maintenance cost for the new Siemens EMS.

CA-IR-106

Ref: HECO T-7, pages 22 to 23 - (EMS Project).

The referenced testimony discusses the anticipated reclassification of labor charges from capital to expense due to the completion of the new Siemens EMS project, including the identification of System Operations employees that supported the implementation of the new EMS project. Please provide the following:

- a. For calendar years 2004, 2005 and 2006, please provide the straight time and overtime hours for the following employees identified as working on the EMS project:
1. Communications personnel (6 employees);
 2. Operating engineering staff (7 employees);
 3. Instrument control group (3-4 employees); and
 4. Substation and relay personnel (3-4 employees).
- b. For the 2007 test year rate case forecast, please provide the straight time and overtime hours for the employees groups identified in part (a) above.
- c. For calendar years 2004, 2005 and 2006, please provide the composite O&M/capital ratios for the employees groups identified in part (a) above.
- d. For the 2007 test year rate case forecast, please provide the composite O&M/capital ratios for the employees groups identified in part (a) above.

CA-IR-107

Ref: HECO T-7, pages 23 to 30 - (OMS Project).

At page 26, HECO T-7 discusses the factory acceptance testing of the new Outage Management System (OMS) planned for January 2007, followed by employee training and OMS system ready for dispatcher use in May 2007. At page 27, it was anticipated that the new software would be ready for use in March 2007, with

amortization commencing in April 2007. Please provide the following:

- a. Was factory acceptance testing completed in January 2007 as planned? Please explain.
- b. What is the current status of employee training? Please explain.
- c. Does the Company still anticipate the new OMS system to be ready for dispatcher use in May 2007? Please explain.
- d. How does the "ready for use" status anticipated for March 2007 relate to the May 2007 dispatcher turn-over? Please explain.

CA-IR-108

Ref: HECO T-7, pages 23 to 30 - (OMS Project).

Beginning at page 27, HECO T-7 discusses the total costs of the OMS project. Please provide the following:

- a. Is the new OMS project included in rate base?
 1. If so, please provide gross plant and related depreciation/ amortization reserve balance at the beginning and end of the 2007 test year forecast.
 2. If not, why not?
- b. How does the final cost (or the current estimate of the final cost, if not yet complete) of the OMS project compare to the cost forecast presented to the Commission in Docket

No. 04-0131? Please explain and provide the referenced amounts.

CA-IR-109

Ref: HECO T-7, pages 23 to 30 - (OMS Project).

At pages 24 and 25, HECO T-7 indicates that the OMS software will automate various functions performed manually and will result in additional efficiencies. Please provide the following:

- a. Has HECO prepared any quantitative analyses of cost savings or other benefits expected to arise from the implementation of OMS? Please explain.
- b. In preparing the 2007 test year forecast, did the Company consider and recognize added efficiencies from allowing HECO personnel to concentrate on restoring power rather than managing paper flow? Please explain.
- c. In preparing the 2007 test year forecast, did the Company consider and recognize added efficiencies of the more timely dispatch of repair crews to problem locations? Please explain.
- d. In preparing the 2007 test year forecast, did the Company reduce nonproductive time and increase productive time because OMS would enable repair crews to restore power more quickly? Please explain.

- e. In preparing the 2007 test year forecast, did the Company consider and recognize any reductions in outside services due to the improved efficiency and availability of its repair crews? Please explain.

CA-IR-110

Ref: HECO T-7, pages 23 to 30 - (OMS Project).

At page 29, HECO T-7 briefly discusses the \$435,000 of costs that will be incurred to train HECO personnel on the used of the SPL OMS. Of the \$435,000, \$27,000 is attributed to hiring a consultant to assist HECO with training materials. Please provide the following:

- a. Please provide a detailed breakdown of the \$435,000 of training costs by type of cost (e.g., outside consultants, training materials, in-house labor for preparers and attendees, on-costs, etc.).
- b. Has the \$435,000 been included in the 2007 test year O&M forecast? If so, please provide a pinpoint reference to the exhibits and/or workpapers where such amounts are identified. If not, please explain.
- c. Is the \$435,000 of training costs expected to be a one-time or an annually recurring cost? Please explain.

CA-IR-111

Ref: HECO T-7, pages 37 to 38 - (T&D Plant).

Beginning at page 37, HECO T-7 briefly summarizes various factors (i.e., new customers, customer requests, increased customer loads, reliability improvements, and safety/system security) that contribute to the increase in T&D utility plant. Please provide the Company's best estimate of the amount of the 2007 forecasted T&D plant additions attributable to each factor.

CA-IR-112

Ref: HECO T-7, pages 43 to 50 and HECO-725 - (T&D Staffing & Outside Services).

Please provide the following contract services information, segregated between vegetation management and other contract services (if possible):

- a. Please provide actual contract services costs charged to T&D O&M expense in calendar years 2004, 2005 and 2006.
- b. Referring to part (a) above, please provide comparable amounts included in the Company's 2007 test year rate case forecast.

CA-IR-113

Ref: HECO T-7, page 51 and HECO-703 - (T&D Inventory).

HECO-703 compares historical T&D inventory balances with the 2006 operating budget and the 2007 test year forecast. Please provide the following:

- a. Please update HECO-703 to reflect the actual 2006 year-end inventory balance.
- b. Please identify, quantify and describe the primary factors that caused the 2005 actual year-end balance to increase by about \$1.47 million above the 2004 year-end balance.

Witness T-8 Mr. Yamamoto.

CA-IR-114

Ref: HECO T-8, page 12 - CIS Cost Deferrals.

Please provide the following regarding the referenced, "accounting treatment to defer certain computer software development costs:"

- a. Provide a monthly summary of all labor and non-labor costs deferred, since the inception of CIS deferral accounting.
- b. For any non-labor cost deferrals identified in your response to part (a) of this information request, provide a breakdown by expense element and identify major payees.
- c. Provide the monthly labor hours deferred, by RA, underlying the labor cost amounts provided in your response to part (a) of this information request.
- d. Explain and provide documentation for the procedures used to isolate costs subject to deferral in connection with the CIS Order.

CA-IR-115

Ref: HECO-WP-805 - Uncollectible Write-off Percentage.

Please provide the following information regarding the uncollectibles ratio proposed by HECO:

- a. Provide an updated electronic spreadsheet including all available actual months subsequent to August 2006.
- b. Explain all reasons why HECO believes that its uncollectible percentage has generally declined throughout the periods shown on this table, indicating any changes in credit and collection policies or other initiative implemented to manage uncollectibles since September 1996.
- c. Has HECO changed any of its account write-off or recovery processes or accounting procedures since September 1996?
- d. If your response to part (c) of this information request is affirmative, please identify and describe each change and provide an estimate of the impact upon write-offs associated with each such change.

CA-IR-116

Ref: HECO-WP-802 - Customer Deposits.

Please provide the actual amounts of Customer Deposit balances by month for the period September 2006 to-date, for all available additional months.

CA-IR-117

Ref: T-8, page 9, lines 10 to 13 - (Customer Accounts Expense Increases).

Has HECO prepared any studies or analyses to quantify the historical relationship between the number of customer accounts and expense levels to determine which cost elements are variable and the degree of variability? If so, please provide a copy of the most recent study in both hard copy and Excel spreadsheet format, with intact cell formulae.

CA-IR-118

Ref: HECO-WP-807 - Late Payment Fee Factor.

Please provide the following regarding the Late Payment Fee vs. Total Bill Revenue calculations:

- a. Provide an expanded calculation back to 1996, comparable to the analysis used for uncollectibles.
- b. Provide updated information to include 2006 actual data in the calculations.
- c. Identify and describe any changes in policies, procedures or accounting methods that may have impacted late payment fee billings or accounting since 1996.

CA-IR-119

Ref. CA-IR-2, HECO T-8, page 4, Attachment 2, page 5 - (Training Budget 50% Reduction).

The referenced document refers to "Reduced training budget by 50% per memo dated Oct 2005 from Tsekimura." Please provide the following:

- a. A complete copy of the referenced "memo."
- b. Was the spending reduction for training implemented across HECO and affiliated Companies (MECO/HELCO)?
- c. What were the reasons for the training reduction?
 1. Provide a copy of all analyses, workpaper, projections and other documents associated with or supportive of the decision to reduce training.
- d. Have training budgets been increased since the "memo?"
 1. If so, please identify the date for any revisions.
 2. Explain any changes to training plans and activity levels since the "memo" was issued.

CA-IR-120

Ref: CA-IR-2, HECO T-8, Attachment 2, page 66 - (OAH Postage).

The referenced document indicates certain assumptions and a projected amount for 2007 billing postage. Please provide the following:

- a. Detailed assumptions and calculations supportive of the \$1,254,525 postage expense estimate.

- b. Referring to the response to part (a) above, please identify the specific postage price changes and effective dates that were assumed, as well as comparable actual postage rate change data.

CA-IR-121

Ref: CA-IR-2, HECO T-8, Attachments 5 and 6 - (Consulting Cost Estimates).

The referenced documents contain projections of consultant costs for "CSD Continuous Improvement" and for "Promote e-Customer Service" activities. Please provide the following:

- a. Explain in detail the work planned in each of these two areas.
- b. Provide complete copies of all documents associated with the planning for or conduct of such work, including without limitation requests for proposal, consulting proposals, contracts, correspondence and internal work planning documentation.
- c. Provide comparative data itemizing and describing individual consulting projects and costs charged to Customer Accounts expenses in the years 2002 through 2006.

Witness T-9 Mr. Hee.

CA-IR-122

Ref: T-9, pages 5 to 7 - (DSM -- impact of the Energy Efficiency Docket).

The referenced testimony makes reference to the pending Energy Efficiency Docket. Please provide the following information:

- a. State with specificity each change that the Company intends to make to its prefiled rate case information as a result of the issuance of Decision and Order No. 23258.
- b. Provide detailed assumptions, calculations and supporting documentation for each element of your response to part (a) of this information request.
- c. What, if any, hiring or staffing decisions have been considered or made by HECO as a result of the issuance of Decision and Order No. 23258.

CA-IR-123

Ref: HECO-904 - (DSM Program Positions).

Please provide the following:

- a. For each listed position, provide a complete copy of the Company's written position description, indicating the skill requirements, activities and responsibilities of that position.
- b. Provide calculations and salary data for the positions listed as incremental in HECO-904, and reconciling extended expenses into the "Labor" column of HECO-905.

CA-IR-124

Ref: T-9, page 20, line 13 - (Power Factor Payback Calculations).

According to the testimony, the Marketing Services Division provides "power factor payback calculations." Please provide the following:

- a. Please explain and provide documentation for the assumptions, input values and algorithms employed to determine power factor payback for customers.
- b. Provide complete copies of three representative recent power factor payback analyses that were performed for actual HECO customers.

CA-IR-125

Ref: T-9, page 23, line 24 - (Corporate Communications Division Activities).

According to the testimony, the Corporate Communications Division is involved in numerous listed publications, sponsorships and other events. Please provide the following additional information:

- a. Copies of the three most recent issues of *Currents*.
- b. Copies of the three most recent issues of *Hoa Hana*.
- c. Copies of the three most recent issues of *PowerLines*.
- d. Provide a descriptive listing of the ten most recently conducted "partnership efforts with major customers," indicating the event/activity, the customer(s) involved and the costs incurred by HECO to participate.

- e. Provide an itemized listing of "promotional and other support for customer events" that was provided by HECO in 2006, indicating the total non-labor expenses incurred for each item.

CA-IR-126

Ref: T-9, page 34, line 25 - (Expansion of Energy Efficiency Advertising).

According to the testimony, "The primary reason for the increase is the additional resources to more aggressively inform customers about energy efficiency and conservation measures and the importance of making such actions an everyday habit." Please provide the following:

- a. Identify and describe all work undertaken by HECO to evaluate alternative levels of advertising that may be undertaken and to determine the optimal level of such spending.
- b. Provide a schedule of non-labor amounts spent on the following in each of the calendar years 2001 through 2006, and in 2007, to-date for:
1. Energy efficiency and conservation measures advertising recorded above-the-line.
 2. Public relations and community outreach events.
- (T-9, page 37, line 4).

3. Energy efficiency and conservation media features and community fairs. (T-9, page 37, line 4).
 4. Live Energy Lite fair. (T-9, page 37, line 6).
 5. Shareholder funded energy efficiency and conservation advertising.
- c. Referring to the response to part (a) above, provide complete copies of all studies, reports, workpapers, analyses and other information produced by or for HECO to evaluate its advertising programs and the cost effectiveness of same.

CA-IR-127

Ref: T-9, page 51, HECO-930 - (Staffing Counts).

According to the testimony, "The test year employee count is 57, which is 8 more than the count as of September 30, 2006." Please provide the following:

- a. Please provide a monthly breakdown of actual staffing in each major area shown on HECO-930, for each month of 2006 and 2007, to-date.
- b. Explain whether full employment (no vacancies) is assumed for the entire proposed staffing at 57 employees or state the specific vacancy assumptions that are used in the Company's rate filing.
- c. Provide the amounts of any temporary labor or contractor charges that were incurred by HECO to meet work

requirement caused by any vacant Customer Solutions Area positions in 2005, 2006 or 2007, to-date.

CA-IR-128

Ref: HECO-912, (Account 910 Comparisons).

Please provide the same level of detail for Account 910, adding columns for Recorded 2004 and Recorded 2006 actual amounts, for comparison to the displayed 2005 and test year amounts.

CA-IR-129

Ref: HECO-924 (PAYS Program Cost Estimate).

Please provide a detailed analysis of all program design and implementation plans as well as supporting assumptions and calculations supporting proposed test year expenses for this new program, as well as a detailed breakdown of actual expenditures by EE in 2007, to-date.

CA-IR-130

Ref: T- 9, page 48, (DSM Reconciliation).

Please explain the procedures employed and provide complete copies of all internal accounting instructions, training materials, accounting manuals, memoranda and other documents employed by HECO employees to properly isolate and code DSM/IRP expenses between base rate recovery versus surcharge tariff recovery accounting categories.

Witness T-10 Ms. Nanbu.

CA-IR-131 Ref: HECO-1002 - (A&G Expenses).

Please update HECO-1002 to include actual 2006 A&G expense.

CA-IR-132 Ref: HECO T-10, page 16 and HECO-1002 - (A&G A/C 921).

Please identify, explain and reconcile the primary factors contributing to the difference between the 2006 Budget of \$5.1 million for Account 921 and the 2007 adjusted test year forecast of \$12.9 million – an increase of about \$7.8 million.

CA-IR-133 Ref: HECO T-10, page 21 and HECO-1002 - (ELLIPSE Migration).

Beginning at page 21, HECO T-10 briefly describes the planned migration of the ELLIPSE application and interfaces from the IBM/BD2 platform to the Unix/Oracle platform. Please provide the following:

- a. Please provide the start and completion dates for the planned migration effort.
- b. Is the migration expected to be performed with outside contractors, in-house employees or a combination of both? Please explain.
- c. Please provide a breakdown of the \$509,000 migration effort by type of cost (e.g., contract labor, in-house labor, on-cost, etc.).

- d. Please provide a copy of any vendor proposals, cost sheets or other documentation supporting the development of the \$509,000 amount.
- e. Is it anticipated that, for a period of time during the migration, the ELLIPSE application will run on both platforms? Please explain and quantify any added transitional costs included in the 2007 test year forecast.
- f. Is the \$509,000 a one-time cost of migration or is it anticipated to be an annually recurring cost? Please explain.

CA-IR-134

Ref: HECO T-10, page 21 and HECO-1002 - (ELLIPSE Migration).

Beginning at line 25 of page 21, HECO T-10 indicates that the migration will simplify the maintenance of enterprise hardware platforms and enhance HECO's ability to obtain vendor support.

Please provide the following:

- a. Were any cost benefit studies prepared by, or for, the Company in support of this planned migration? If so, please identify and provide a copy of each such study.
- b. Is it anticipated that this migration will result in cost savings? Please explain.
- c. Referring to part (b) above, has the Company recognized any identified cost savings in the 2007 test year forecast?

1. If so, please quantify such amounts and provide a pinpoint reference to the exhibits or workpapers containing such savings.
2. If not, why not?

CA-IR-135

Ref: HECO T-10, page 22 and HECO-1002 - (Axis & Strategizer).

At page 22, HECO T-10 describes the additional \$271,000 for the Axis and Strategizer software implementation. Please provide the following

- a. Is the \$271,000 for the implementation of the new software or does this amount represent software licensing fees? Please explain.
- b. Please provide a copy of any vendor proposals, cost sheets or other documentation supporting the development of the \$271,000 amount.
- c. Is the \$271,000 a one-time implementation cost or is it anticipated to be an annually recurring cost? Please explain.

CA-IR-136

Ref: HECO T-10, pages 64 and 78 and HECO-1021 - (Pension Asset).

At line 6 of page 64, HECO T-10 states that there is an accumulated deferred income tax reserve balance associated with the prepaid pension asset, which the Company proposes to include

in rate base. Please provide the amount of the pension asset related ADIT reserve balance included in the beginning and ending test year rate base.

CA-IR-137

Ref: HECO T-10, page 64 and HECO-1021 - (Pension Asset).

Please update HECO-1021 to reflect actual 2006 activity and any revised estimated for 2007.

CA-IR-138

Ref: HECO T-10, page 64 and HECO-1021 - (Pension Asset).

In HECO's 2005 test year rate case, the Company's response to CA-IR-355 indicated that \$10.604 million of NPPC was included in the 1995 test year estimate pursuant to HECO's rebuttal testimony in that rate case. Is this amount still accurate? Please explain.

CA-IR-139

Ref: HECO T-10, page 64 and HECO-1021 - (Pension Asset).

In HECO's 2005 test year rate case, HECO-R-1609 indicated that \$4.588 million of NPPC was included in the test year estimate in the 2005 test year rate case. Is this amount still accurate? Please explain.

CA-IR-140

Ref: HECO T-10, page 64 and HECO-1021 - (Pension Asset).

Please provide the pension contribution date(s) associated with the \$6 million contribution shown for calendar year 2005.

CA-IR-141

Ref: HECO T-10, pages 62 to 63 (FAS158 Pension Accounting).

Beginning at line 18 of page 62, HECO T-10 discusses the pension accounting changes that resulted from the adoption of FAS158.

Please provide the following:

- a. When did HECO adopt FAS158 for financial and regulatory accounting purposes?
- b. For purposes of the 2007 test year forecast, please identify and describe the amount of any balance sheet account activity (i.e., assets, liabilities, deferred income tax reserves or common equity) and journal entries affecting the Company's financial results directly attributable to FAS158.
If none, please so state.

CA-IR-142

Ref: HECO T-10, pages 68 to 72 (AOCI Pension Accounting).

Beginning at line 15 of page 68, HECO T-10 generally discusses AOCI accounting and describes the then-current status of consolidated a consolidated application filed by HECO, HELCO and MECO on December 8, 2005 (Docket No. 05-0310). On January 26, 2007, the Commission issued Decision and Order

No. 23223 denying the relief requested in the joint application. Recognizing that HECO's pending rate case application was filed about one month prior to the Commission order denying the relief requested in Docket No. 05-0310, please provide the following:

- a. Please clarify whether it was the original intent of the referenced testimony of HECO T-10 to merely summarize the nature and status of Docket No. 05-0310.
- b. Subsequent to the issuance of Decision and Order No. 23223, is it the intent of the referenced HECO T-10 testimony to renew HECO's request for relief sought in Docket No. 05-0310 as part of the pending rate case?
- c. If the response to part b. of this information request is yes, please explain.

CA-IR-143

Ref: HECO T-10, page 75 (Pension Asset).

In discussing pension asset accounting under FAS87 and FAS158, HECO T-10 states the following at line 1 of page 75: "If no pension-related asset is included in rate base there would be an increase in the cost of capital, which would need to be taken into consideration in the revenue requirement calculation." Please provide the following:

- a. Please provide the regulatory basis for this contention, including copies of all supporting information.

- b. Has HECO quantified what it believes is the increase in the cost of capital that would be required if the pension asset were excluded from rate base? Please explain.
- c. Referring to part (b) above, please provide a pinpoint reference to the testimony, exhibits and workpapers of the HECO witness(s) that provides the cost of capital quantification. If none, please so state.

CA-IR-144

Ref: HECO T-10, page 75 (Pension Asset).

At line 16 of page 75, HECO T-10 states: "The prepaid pension asset is the net of the cumulative investor supplied fund contributions and the previously recognized pension cost." Please provide the following:

- a. Please define "investor supplied funds" as used in this context.
- b. Referring to HECO-1701, the Company's rate base includes a "Pension Regulatory Asset" of \$161,188,000 and a "Pension Liability" of \$101,942,000 – a net rate base impact of \$59,246,000. Please confirm that this net amount is intentionally equal to the average of the year-end 2006 and 2007 pension asset balances of \$68,260,000 and \$50,231,000, respectively, as set forth on HECO-1021. If this cannot be confirmed, please explain.

- c. Please identify each specific transaction in which HECO's investors provided the Company with \$59.246 million of funds that were contributed to the pension fund.

CA-IR-145

Ref: HECO T-10, pages 75 to 78 (Pension Asset).

Beginning at line 21 of page 75, HECO T-10 generally describes the circumstances giving rise to the prepaid pension asset, including the following excerpt from page 76, lines 20-23: "Beginning in 1999 and continuing through 2002, HECO began experiencing negative NPPC accruals. Therefore, although no fund contributions were made in those years, the prepaid pension asset grew significantly." The following appears at page 77, lines 3-7: "Even though the negative NPPC accruals in the period 1999 through 2002 increased the prepaid pension asset significantly during these years, ERISA prohibited HECO from taking cash refunds from the pension fund. Funds contributed to the pension fund must stay in the pension fund (except under special circumstances such as plan termination)." Please provide the following:

- a. At any time during the period 1999 through 2002, did HECO implement any reductions to its tariff rates to flow the negative pension costs through to the benefit of its regulated customers?

1. If so, please identify each docket and decision in which such rate reductions were implemented.
 2. If not, please so state.
- b. At any time during the period 1999 through 2002, did HECO implement any refunds designed to flow the negative pension costs through to the benefit of its regulated customers?
1. If so, please identify each docket and decision in which such customer refunds were implemented.
 2. If not, please so state.
- c. At any time during the period 1999 through 2002, did HECO implement any reductions to then-existing cost tracking mechanisms, such as ECAC, designed to flow the negative pension costs through to the benefit of its regulated customers?
1. If so, please identify each docket and decision in which such offsets were implemented.
 2. If not, please so state.

CA-IR-146

Ref: HECO T-10, pages 75 to 78 (Pension Asset).

Beginning at line 9 of page 77, HECO T-10 generally describes the circumstances giving rise to the prepaid pension asset, including the following excerpt: "Thus, even though HECO's contributions to

the pension fund generally matched the NPPC in earlier years, HECO could not take cash from the pension fund to match the negative NPPC accruals in 1999 through 2002." Please provide the following:

- a. Did HECO provide any cash to ratepayers to match the negative NPPC accruals in 1999 through 2002?
- b. If the response to part (a) is affirmative, please provide a detailed explanation of such cash flows to ratepayers and provide copies of all supporting documents.
- c. If the response to part (a) is negative, please so state.

CA-IR-147

Ref: HECO T-10, pages 78 to 83 (Pension Asset).

The referenced testimony discusses the Company's rationale for including the prepaid pension asset in rate base. Beginning at line 4 of page 79, HECO T-10 states: "From the standpoint of accounting theory, the prepaid pension asset was funded by investors. It is a fundamental principle of accounting that all assets must be funded either by debt or equity. Investors, not ratepayers, provide the funds for a corporation's debt and equity. When an asset is positive it necessarily means that with respect to total company costs the shareholders have contributed some surplus that needs to be recognized in rate base." Please provide the following:

- a. Please provide a copy of all documentation relied upon that supports the "fundamental principle of accounting" that the Company's investors have provided funds to support the prepaid pension asset, including any pinpoint citations to and copies of authoritative accounting literature relied upon in reaching this conclusion.
- b. Please provide a copy of all documentation relied upon that supports the regulatory theory that any positive asset balance has been provided by shareholders and needs to be included in rate base, including any pinpoint citations to HPUC rules, Hawaii statutes, regulatory decisions or other authoritative literature.
- c. Please provide a copy of HECO's detailed balance sheet as of December 31, 2006.
- d. For each positive asset set forth in the balance sheet supplied in response to part (c) above, please provide a specific citation to the appropriate line on HECO-1701 which contains such amount.

CA-IR-148

Ref: HECO T-10, pages 78 to 83 (Pension Asset).

The referenced testimony discusses the Company's rationale for including the prepaid pension asset in rate base. Beginning at line 10 of page 79, HECO T-10 states: "Payments made to the

pension fund were from the same sources of funds that HECO would use to make any investment. There were no special contributions from any source. Ratepayers do not fund Company investments. Rather, they pay for services and those payments are recorded as revenues. Investor funds are used to fund the pension plan just as investor funds are used to construct or purchase the gross plant assets. Investors contributed \$138.3 million to the pension plan for the period 1987 to 2005 (see HECO-1021 page 2)." Please provide the following:

- a. Please confirm that HECO concurs that the HPUC establishes utility rates and charges that are cost-based, as determined by the test year employed in periodic rate proceedings. If this cannot be confirmed, please explain.
- b. Please confirm that the revenues HECO collects from utility customers for the services provided are a product of customer usage and the cost-based utility rates. If this cannot be confirmed, please explain.
- c. Please confirm that the revenue HECO collects from its tariff customers does provide the Company with a source of cash flow from utility operations. If this cannot be confirmed, please explain.

Ref: HECO T-10, pages 78 to 83 (Pension Asset).

The referenced testimony discusses the Company's rationale for including the prepaid pension asset in rate base. Beginning at line 17 of page 81, HECO T-10 states: "Ratepayers have benefited from the prepaid pension asset, and its components, in several ways. The negative accruals of the past are negative costs that reduced expenses and lowered revenue requirements, which in turn helped make it unnecessary for HECO to apply for a general rate increase for the ten-year period from 1994 to 2004." Please provide the following:

- a. Please identify each planned application for a rate increase HECO avoided as a result of the negative NPPC.
- b. Please confirm that reductions in other operating expenses or increases in operating revenues between rate cases would also help make it unnecessary for HECO to apply for a general rate increase for the ten-year period from 1994 to 2004. If this cannot be confirmed, please explain.
- c. Please confirm that, in setting utility rates, the HPUC considers all revenue, expense, investment and capital components within a forecasted test year for each filed rate case. If this cannot be confirmed, please explain.
- d. Referring to part (a) above, please provide a copy of all existing documentation demonstrating that the existence of

negative NPPC allowed HECO to avoid a rate increase for ten years.

CA-IR-150

Ref: HECO T-10, pages 78 to 83 (Pension Asset).

The referenced testimony discusses the Company's rationale for including the prepaid pension asset in rate base. Beginning at line 22 of page 81, HECO T-10 states: "In addition, some of the negative NPPC was transferred to construction resulting in a lower amount of construction work in progress upon which AFUDC is accrued and thus, lower costs added to rate base. The transfer percentage in HECO's test year 1995 rate case was about 34 percent. In the present proceeding, approximately 27% is transferred to construction and to outside third parties for services rendered." Please provide the following:

- a. For each year since adoption of FAS87 in 1987, please provide the actual percentage of NPPC that was:
 1. Transferred to capital.
 2. Transferred to outside third parties for services rendered.
- b. In each rate case test year since adoption of FAS87 in 1987, please provide the percentage of NPPC that was:
 1. Transferred to capital.

2. Transferred to outside third parties for services rendered.

Witness T-11 Mr. Harris.

CA-IR-151

Ref: HECO-1101 - (Property, Injuries & Damages).

Please update HECO-1101 to reflect 2006 actual amounts.

CA-IR-152

Ref: HECO T-11, page 2 and HECO-1101 - (Property, Injuries & Damages).

Beginning at page 2, HECO T-11 discusses why the 2007 test year estimate for Accounts 924 and 925 were higher than 2005 actual expenses. At line 8, the referenced testimony briefly describes an unanticipated avoidance of a \$1 million liability claim retention expensed in prior years and lower than trended workers compensation claims. Please provide the following:

- a. When did HECO first become aware of the \$1 million liability claim retention? Please explain.
- b. When did HECO receive or effectively avoid the \$1 million liability claim? Please explain.
- c. Was the avoidance of the \$1 million liability claim recognized in HECO's 2005 test year rate case? Please explain.
- d. Was the reduced worker compensation costs recognized in HECO's 2005 test year rate case? Please explain.

CA-IR-153

Ref: HECO T-11, page 4 and HECO-1101, page 3 - (Absorbed Losses).

Referring to HECO-1101, page 3, the absorbed losses (Account 925.02) were a negative \$549,600 in 2005 compared to the 2007 test year forecast of \$1,255,200. Please provide the following:

- a. Please identify and describe the primary factors that caused the referenced absorbed losses to be negative in 2005.
- b. Were the negative absorbed losses recognized in HECO's 2005 test year rate case? Please explain.

CA-IR-154

Ref: HECO T-11, page 30 and HECO-1104 - (Absorbed Losses).

The referenced testimony states that historical levels of recorded losses for calendar years 1998 through February 2006 were indexed to 2005 dollars. Please provide the following:

- a. Please provide the basis for the Company's assumption that absorbed losses are correlated with inflation (i.e., CPI).
- b. Please provide a copy of any and all studies prepared by or relied upon by the Company to conclude that annual levels of absorbed losses are correlated with inflation.

CA-IR-155

Ref: HECO T-11, page 30 and HECO-1104 - (Absorbed Losses).

Please provide the following:

- a. Referring to the top "half" of HECO-1104, do the "recorded" amounts represent absorbed losses on a paid or an accrued basis? Please explain.
- b. Please provide additional documentation supporting the following "recorded" amounts:
 1. Gen Liab Bod Inj (BI): \$766,545 in 1998.
 2. Gen Liab Bod Inj (BI): \$816,445 in 2001.
 3. Gen Liab Reserves: \$536,200 in 2002.
 4. Gen Liab Bod Inj (BI): \$401,049 in 2003.
 5. Gen Liab Prop Dmg (PD): \$537,575 in 2004.
- c. The Gen Liab Reserve amount is \$904,000 in 2004 and \$(964,000) in 2005. Is the 2005 negative amount related to the significantly large amount in 2004? Please explain.

Witness T-12 Ms. Price.

CA-IR-156

Ref: HECO-1202 & HECO-1203 (FAS87 NPPC).

The referenced exhibit provides the 2006 NPPC and the 2007 estimated NPPC. Please provide the following:

- a. Please provide a copy of all correspondence and other materials from Watson Wyatt Worldwide that explained or

otherwise accompanied the documents included in HECO-1202.

- b. Referring HECO-1202, p. 1, and HELCO-1203, page 2, please clarify whether the 2006 NPPC of \$14,236,666 is an actual or estimated value. If estimated, please provide the actual NPPC for 2006.
- c. Referring to part (b) above, HECO-1021, page 2, contains a notation that the 2006 NPPC of \$14,237,000 represents an estimated amount. Please explain and reconcile with the response to part (b) above.
- d. Referring to HECO-1202, the 2006 discount rate and asset return assumptions were 5.75% and 9.0%, respectively. Comparable rates for the 2007 estimate are 6.0% and 8.5%, respectively. Please provide the estimated effect on the 2007 NPPC assuming the discount rate and asset return assumptions were the same as 2006 (i.e., 5.75% and 9.0%).

CA-IR-157

Ref: HECO T-12, page 6 (FAS87 Actuarial Study).

According to the referenced testimony, actual 2007 NPPC will be available from Watson Wyatt in June 2007. Please provide a complete copy of the 2007 actuarial study, as soon as it becomes available.

Beginning at line 4 of page 6, HECO T-12 states: "Since the adoption of SFAS 87 in 1987, the Company has consistently and properly incorporated the NPPC in the forecast of employee benefits and the Commission accepted HECO's treatment of pension costs consistent with SFAS 87...." The referenced testimony then proceeds to list various Commission Decisions and Orders dating back to 1991. Please provide the following:

- a. Since the adoption of FAS87 in 1987, please confirm that HECO has not filed an annual rate case nor received annual rate changes in each and every year. If this cannot be confirmed, please explain.
- b. For each HECO rate case with an effective date subsequent to the adoption of FAS87 in 1987, please provide the following:
 1. The docket number.
 2. The effective date of the both the interim and final decision and order.
 3. The forecast test year on which rates were based.
 4. The amount of NPPC included in both the interim and final decision and order, showing amount before and after transfers to capital and other third party billings.

CA-IR-159

Ref: HECO T-12, page 18 (OPEB Contributions).

At line 17 of page 18, HECO T-12 states: "As directed by the Commission in Decision and Order No. 13659, HECO funds the entire postretirement benefit costs to the maximum extent possible using tax advantaged funding vehicles." Please provide the following:

- a. In any calendar year since the issuance of Decision and Order No. 13659, has HECO been unable to fund the entire OPEB NPBC costs to tax advantaged funding vehicles? Please explain.
- b. In any calendar year since the issuance of Decision and Order No. 13659, has HECO not funded the entire OPEB NPBC costs to an external fund, whether tax advantaged or not? Please explain

CA-IR-160

Ref: HECO T-12, pages 28 to 29 (Training Costs).

Beginning at line 13 of page 28, HECO T-12 discusses the test year estimate for training and development costs of \$230,000. Please provide the following:

- a. Does the \$230,000 test year estimate include both internal Company labor and non-labor costs? Please explain.
- b. Please provide a breakdown of the 230,000 test year estimate between labor and non-labor.

- c. Please identify the specific training and development programs encompassed by the \$230,000 test year estimate.
- d. Please provide a breakdown of the \$230,000 test year estimate by program identified in response to part (c) above.
- e. For calendar years 2001-2006, please provide actual training and development costs for comparison to the \$230,000 test year estimate.

CA-IR-161

Ref: HECO T-12, pages 32 to 34, HECO-1218 & HECO-1219 (HRS Project).

Please provide the following:

- a. Please provide actual monthly expenditures incurred to-date, by phase and by stage.
- b. Please provide the budgeted monthly expenditures, by phase and by stage.
- c. Please provide, in a spreadsheet file format, the amount of AFUDC capitalized/deferred on a monthly basis for both actual and budgeted amounts.
- d. Referring to parts (b) and (c) above, please provide the monthly AFUDC rates applied to the monthly expenditures.

Witness T-15 Mr. Okada.

CA-IR-162

Ref: HECO T-15, page 4 - (SUTA Tax Base/Rate for 2007).

Please provide the following regarding the estimated 2007 SUTA tax rate and base that was used in the Company's filing:

- a. A statement of the State-approved actual base and rate effective for 2007.
- b. A copy of the authority relied upon for your response to part (a) of this information request.

CA-IR-163

Ref: HECO-WP-1501, page 2 - (Payroll Tax Distribution).

Please provide the following:

- a. Copies of underlying reports and documentation supportive of the "Allocation of Payroll Taxes Based on Labor Dollars Charged.
- b. A comparative analysis of actual total payroll distribution percentages between Capital, Operations and Other, by NARUC Account, for calendar years 2004, 2005 and 2006.
- c. An explanation of significant changes in the payroll distribution between years, as set forth in your response to part (b) of this information request.

CA-IR-164

Ref: HECO-1501 - (Revenue Taxes).

Please provide calculations of the proposed test year PSC tax, PUC fee and Franchise Royalty revenue tax items at present, current and proposed rates, since supporting calculations of such amounts are not set forth in WP-1501.

CA-IR-165

Ref: HECO T-15, page 27, line 22 - (Section 199 Deduction).

According to the testimony, "We have not had the opportunity to recalculate the §199 deduction under present and proposed rates in this direct submission." Please provide the following information:

- a. The Company's best estimate of the HECO § 199 deduction, based upon test year proposed revenue and expense amounts and allocations, assuming HECO income taxes are calculated on a stand-alone basis (no consolidated HEI return).
- b. Identify and describe any known uncertainties or potential issues with regard to the calculations provided in your response to part (a) of this information request.
- c. State whether HECO objects to reflection of an appropriately calculated Section 199 deduction within test year ratemaking income tax expenses.

- d. If your response to part (c) of this information request is affirmative, explain all bases for such objection and provide supporting documentation for same.

CA-IR-166

Ref: HECO T-15, page 32, line 16 - (FIN 48 Impacts).

According to the testimony, "HECO is in the process of evaluating its uncertain tax positions and their impact on the implementation of FIN 48, and the Company has not yet quantified the impact."

Please provide the following information:

- a. Describe the status of HECO's evaluation and identify each "uncertain tax position" that is believed to exist.
- b. List and quantify each adjustment to the Company's asserted rate base or income statement that is proposed by HECO with respect to FIN 48, if any.
- c. Provide complete copies of all studies, reports, analyses and other documents associated with your response to part (b) of this information request.

CA-IR-167

Ref: HECO T-15, page 33, HECO-WP-1508 - (GET Increase).

According to the testimony, "The surcharge adds an additional 0.5% ...tax to most third party vendor costs that are subject to the GET." Please provide the following information:

- a. Describe the basis for the apparent assumption that all HECO vendors in the categories listed in HECO-1508 will, in fact, pass through the GET surcharge to HECO.
- b. State which HECO vendors in each of the categories listed in HECO-1508 have elected option 1 (pass-through nothing), option 2 (pass-through 4.5%) or option 3 (pass-through 4.712% in their billings to HECO in 2007.
- c. Identify and quantify any revisions to the calculations in HECO-1508 that are required because certain vendors are not passing through GET or GET surcharge amounts.
- d. Provide complete copies of all documents associated with or supportive of your response to parts (a) through (c) of this information request.

CA-IR-168

Ref: HECO T-15, page 34 - (Changes in Tax Payments - Working Cash Effects).

Please provide copies of the calculations and the referenced authoritative regulations relied upon to revise the Company's tax payment timing for measurement of Working Cash.

HECO T-20 Mr. Young.

CA-IR-169

Ref: HECO T-20, page 16, line 10 - (Power Factor Studies).

According to the witness, "HECO has not completed such a study at this time. HECO's preliminary analysis of the power factor issue

indicates that the cost basis for power factor is in fact complex and subject to variation depending on the needs of the HECO system to meet customer var-hr ("vars") requirements." Please provide the following:

- a. Copies of reports, analyses, workpapers, projections and other documentation associated with all work done with regard to this issue, including without limitation all documents associated with the referenced "preliminary analysis."
- b. A detailed statement of all work planned to complete the referenced "study," indicating any contractors to be employed, employees to be assigned, and specific tasks anticipated to be involved in the completion of this work.
- c. What is HECO's estimate of the timeline, milestones and completion date for the study of power factor cost of service issues?

CA-IR-170

Ref: HECO T-20, page 23 - (System Loss Analysis).

Please provide a complete copy of the referenced "System Loss Analysis" and underlying workpapers, indicating where the results of such studies are reflected in HECO-WP-2001 and where the results are used in specific rate design proposals.

CA-IR-171

Ref: HECO T-20, page 38, HECO-2017, page 12 - (Schedule F Rates).

According to the testimony, HECO proposes to add a customer charge of \$20.00 to Schedule F. At HECO-2017, page 12, rate increase percentages of up to 52% appear to result from this proposal. Please provide the following information:

- a. Explain why a customer charge should be added to this rate at this time, with reference to any changes in underlying costs or service characteristics that were considered.
- b. Describe whether customer rate shock effects for small volume Schedule F customers were considered in formulating this rate proposal.
- c. State whether alternative levels of customer charge for Schedule F would be acceptable to move gradually toward cost of service, while mitigating rate change impacts upon certain customers.

CA-IR-172

Ref: T-20, page 16, line 4 - (Schedule H Closure).

According to the witness, "HECO proposed to close Schedule H to new customers." Please provide the following:

- a. Explain whether HECO is able to cost justify allowing existing Schedule H customers to remain on that rate.
- b. If your response to part (a) of this information request is affirmative, please provide complete copies of all studies,

reports, and other information indicative of cost justification for continued service under Schedule H.

- c. If your response to part (a) of this information request is negative, please explain whether closing the rate will be effective in migrating Schedule H customers onto other rates schedules, indicating the expected future date when the rate might be discontinued.
- d. Please explain whether HECO would support Schedule H rate or tariff changes that might induce customers now on Schedule H to elect to migrate to Schedules G or J.
- e. What would be the estimated current monthly bill impact upon a Schedule H customer with average usage characteristics if Schedule H were withdrawn and the customer was billed on either Schedule G or Schedule J at currently effective rates?

CA-IR-173

Ref: T-20, page 9, Distribution Facilities – Customer Component.

According to Mr. Young's testimony, "The distribution lines and transformers are assigned to demand and customer components, since the size and costs of these facilities are dependent not only on the customers' load, but also on the type and location of the customers." Please provide complete copies of HECO distribution engineering manuals, instructions, guidelines and all other

documents that are used to define how HECO distribution facilities are sized and designed to meet the types, locations and anticipated load levels of customers under alternative circumstances.

CA-IR-174

Ref: HECO WP-2001, pages 137 to 147, Minimum System Poles.

Please provide the following information regarding the 30 foot minimum system distribution pole:

- a. Confirm that a 30 foot distribution pole was used by HECO to determine its 48% customer component weighting for the distribution poles account.
- b. If anything other than an unqualified confirmation is provided in response to part (a) of this information request, please explain the response and illustrate how the minimum pole size was determined and converted into the customer component weighting value.
- c. Explain whether any poles shorter than 30 feet have been installed by HECO since 1984.
- d. Provide a complete statement of HECO's policy with regard to distribution pole placement and sizing, under representative frequently encountered typical conditions of pole initial installation or replacement.

- e. If the response to part (c) of this information request is affirmative, please provide the dates and numbers of such pole installations.
- f. What approximate percentage of pole installations in a representative year are replacements of existing poles, rather than new pole line construction?

CA-IR-175

Ref: HECO WP-2001, page 135, Minimum System Overhead Conductor.

Please provide the following information regarding the minimum system overhead primary conductor:

- a. Provide detailed workpapers supporting the minimum system customer component proposed for OH primary and OH secondary conductor.
- b. Provide a complete statement of HECO's policy with regard to distribution overhead primary conductor placement and sizing, under representative frequently encountered typical conditions of overhead pole line initial installation or replacement.
- c. Provide a complete statement of HECO's policy with regard to distribution overhead secondary conductor placement and sizing, under representative frequently encountered typical conditions of overhead pole line initial installation or replacement.

- d. Approximately how many individual residential customers within single family detached homes, using average test year demand levels of single phase service, could be served by the specified minimum system primary overhead conductor?
- e. Approximately how many individual residential customers within separately metered apartments, using average test year demand levels of single phase service, could be served by the specified primary overhead conductor?
- f. Approximately how many individual residential customers within single family detached homes, using average test year demand levels of single phase service, could be served by the specified minimum system secondary overhead conductor?
- g. Approximately how many individual residential customers within separately metered apartments, using average test year demand levels of single phase service, could be served by the specified secondary overhead conductor?

CA-IR-176

Ref: HECO WP-2001, page 135, Underground Conduit.

Please provide the following information regarding the test year treatment of minimum system underground conduit:

- a. Explain whether any minimum system analysis was undertaken for the conduit account.

- b. If your response to part (a) of this information request is affirmative, please explain how the minimum conduit size was determined and converted into the customer component weighting value.
- c. Provide complete copies of all workpapers relied upon to determine a customer component for the conduit account.
- d. Provide a complete statement of HECO's policy with regard to underground conduit placement and sizing, under representative frequently encountered typical conditions of pole initial installation or replacement.
- e. What is HECO's undergrounding policy for distribution facilities?

CA-IR-177

Ref: HECO WP-2001, pages 148-154, Underground Primary Conductors.

Please provide the following information regarding the #4_3/C_CU minimum system underground primary conductor:

- a. Confirm that #4_3/C_CU underground conductor was used by HECO to determine its 41% customer component weighting for the underground primary conductors account.
- b. If anything other than an unqualified confirmation is provided in response to part (a) of this information request, please explain the response and identify how the minimum

{ underground primary conductor size was determined and converted into the customer component weighting value.

- c. Explain why #4_3/C_CU 106 amp conductor appears to have been installed only sporadically by HECO since 1989, as shown on page 148.
- d. Explain why the next larger #1/0_3/C_CU 152 amp underground conductor was not installed in any of the years 1997 through 2001, as shown on page 149.
- e. Provide a complete statement of HECO's policy with regard to underground primary conductor placement and sizing, under representative frequently encountered typical conditions of pole initial installation or replacement.
- f. Approximately how many individual residential customers within single family detached homes, using average test year demand levels of single phase service, could be served by a single #4_3/C_CU 106 amp underground primary conductor?
- g. Approximately how many individual residential customers within separately metered apartments, using average test year demand levels of single phase service, could be served by a single #4_3/C_CU 106 amp underground conductor?

Ref: HECO WP-2001, pages 155 to 160, Underground Secondary Conductors.

Please provide the following information regarding the #4_3/C_CU 95 amp minimum system underground secondary conductor:

- a. Confirm that #4_3/C_CU 95 underground conductor was used by HECO to determine its 55% customer component weighting for the underground secondary conductors account.
- b. If anything other than an unqualified confirmation is provided in response to part (a) of this information request, please explain the response and identify how the minimum underground secondary conductor size was determined and converted into the customer component weighting value.
- c. Explain why no #4_3/C_CU 95 conductor appears to have been installed by HECO for the years 1987-1990 and 1993-1996 (workpaper page 155).
- d. Provide a complete statement of HECO's policy with regard to underground secondary conductor placement and sizing, under representative frequently encountered typical conditions of initial installation or replacement.
- e. Approximately how many individual residential customers within single family detached homes, using average test year demand levels of single phase service, could be served by a

single #4_3/C_CU 95 amp underground secondary conductor?

- f. Approximately how many individual residential customers within separately metered apartments, using average test year demand levels of single phase service, could be served by a single #4_3/C_CU 95 amp underground secondary conductor?

CA-IR-179

Ref: HECO WP-2001, page 161, Minimum System Transformers.

Please provide the following information regarding the minimum system transformer calculations:

- a. Confirm that an average installed cost of 25 KVA overhead transformer and padmount transformers was used by HECO to determine its 60% customer component weighting for the transformers account, by combining an analysis of overhead 1 phase transformers with separate analyses of 1-phase and 3-phase padmount transformers.
- b. If anything other than an unqualified confirmation is provided in response to part (a) of this information request, please explain the response and identify how the minimum transformer size was determined and converted into the customer component weighting value.

- c. Provide detailed supporting workpapers for the annual installed cost and replacement cost for each category of transformer shown on page 161.
- d. Provide a complete statement of HECO's policy with regard to distribution transformer placement and sizing, under representative frequently encountered typical conditions of initial installation or replacement.
- e. Approximately how many individual residential customers within single family detached homes, using average test year demand levels of single phase service, could be served by a single 25 KVA overhead transformer?
- f. Approximately how many individual residential customers within single family detached homes, using average test year demand levels of single phase service, could be served by a single 25 KVA padmount transformer?
- g. Has HECO installed any transformers smaller than 25 kVa since 1984?
- h. If your response to part (g) of this information request is affirmative, please provide detailed information by vintage year of installed units and costs for each category of installations (overhead, padmount, 1/3 phase).
- i. If your response to part (g) of this information request is affirmative, please explain why smaller sized transformers

were not used as part of the Company's assumed minimum sized system.

CA-IR-180

Ref: HECO WP-2013, pages 1 to 5, Marginal Cost of Service Study.

Please explain any changes made to the Company's Marginal Cost Study since the Company's last rate case filing and provide complete copies of supporting workpapers for all marginal cost study results reflected in HECO WP-2013, including electronic excel files for all such data.

DOCKET NO. 2006-0386

HAWAIIAN ELECTRIC COMPANY, INC.

FOURTH SUBMISSION OF INFORMATION REQUESTS

General Information Requests.

CA-IR-181

Ref: CA-IR-5, page 7 HECO Annual Report (Energy Management System).

According to the Annual Report, "Most notable in 2006 was the completion of a new \$27 million HECO Dispatch Center on Oahu, home to a new Energy Management System that helps ensure that system demand is met with optimum efficiency." Please provide the following information:

- a. A complete copy of the economic analyses prepared by or for HECO to justify its investment in the Dispatch Center and EMS system.
- b. A summary of the test period investment and expense impacts of the Dispatch Center and EMS, by NARUC Account.
- c. Calculations indicating whether or not the expected economic benefits of the investment in the Dispatch Center and the EMS are fully reflected in the test year, based upon the values summarized in your response to part b. of this information request.

Ref: CA-IR-5, page 84 HECO Annual Report (Advanced Meter Infrastructure (AMI) / Broadband Over Power Line).

According to the Annual Report, "HECO is evaluating the feasibility of utility applications using power line and wireless technologies for two-way communication. HECO is currently partnering with Sensus Metering Systems to field test an Advanced Metering Infrastructure system that delivers hourly meter reads, which can enable time-of-use pricing options for HECO customers." Please provide the following information:

- a. A detailed description of the Company's AMI studies and pilot program results to date, explaining whether and how HECO intends to proceed with further studies or investment in advanced metering or broadband over power line technologies.
- b. Copies of all contracts between HECO and Sensus, Earthlink, City/County government and all other parties involved in the Company's efforts.
- c. Copies of all reports, analyses, workpapers, projections and other documents prepared by or for HECO personnel to summarize the results of the trial of Broadband Over Power Line ("BPL") completed by HECO.
- d. Copies of all reports, analyses, workpapers, projections and other documents prepared by or for HECO personnel to

summarize the results of the trial of automatic meter reading pilot that was completed by HECO in late 2006.

- e. State the amounts of test year rate base investment and operating expenses (if any) by NARUC account that are included in the asserted revenue requirement for BPL or AMI research or installations.

CA-IR-183

Ref: CA-IR-5, page 85 HECO Annual Report (Electronic Shock Absorber ESA).

According to the Annual Report, "HECO received a U.S. patent in February 2005 for an ESA that addresses power fluctuations from wind resources." Please provide the following information:

- a. A detailed description of the Company's spending to date on ESA analysis and investment in facilities, by NARUC Account, indicating the funding provided by HECO, HELCO and MECO in each year.
- b. A complete copy of the intellectual property agreement with S&C Electric Company.
- c. Explain the Company's plans with regard to repair or replacement of the ESA demonstration system on the Big Island that was damaged in the earthquake.
- d. Describe the Company's plans for broader deployment of ESA or alternative technologies with the State to address power fluctuation issues arising from wind generation.

- e. State the amounts of test year rate base investment and operating expenses (if any) by NARUC account that are included in the asserted revenue requirement for ESA or other power fluctuation research or installations.

CA-IR-184

Ref: CA-IR-5, page 131 HECO Annual Report (East Oahu Transmission Project).

According to the Annual Report, "As of December 31, 2006, the accumulated costs recorded for the EOTP amounted to \$30 million...." Please provide the following information:

- a. A breakdown of EOTP incurred costs by NARUC account as of December 31, 2006.
- b. Describe whether any costs associated with EOTP have been included in the asserted test year revenue requirement.
- c. Provide complete copies of any documents associated with your response to part b. of this information request.

Witness T-1 Mr. Alm.

CA-IR-185

Ref: T-1, page 9, HECO-111, 112 (Equal Percentage Increase).

- a. Please state and explain all reasons why HECO is proposing an "equal percentage increase" over present rates in this Docket, given the results of its class cost of service analysis.
- b. If the revenue requirement approved by the Commission is significantly lower than the recommended amounts shown in

HECO-111 and HECO-112, does the Company intend to modify its "equal percentage increase" recommendation?

- c. If your response to part b. is affirmative, please state with specificity the expected changes to be made and the basis for alternative revenue distribution positions so that the Consumer Advocate will have an opportunity to respond to any alternative positions in its testimony.

CA-IR-186

Ref: T-1, page 8, lines 25-28 (HECO Earnings at Present Rates).

Please provide complete copies of all documents developed and circulated among HECO employees to inform them of budget reductions and/or cost savings to be implemented as a result of financial considerations during 2005, 2006 and 2007, to date.

Witness T-2 Mr. Willoughby.

CA-IR-187

Ref: T-2, page 18 (Schedule R Customer Projections).

Please provide a complete documentation of the "additive linear trend time series model" and supporting calculations for all adjustments made to customer count input assumptions for Kukui gardens and the 215 N. King Street customers (hard copy and Excel files, if available).

CA-IR-188

Ref: T-2, page 21 (Commercial Customer Projections).

Please provide a complete copy of all time series models used by HECO to develop its test year commercial customer count projections, including modifications or separate modeling used for Schedule H (hard copy and Excel files, if available).

CA-IR-189

Ref: HECO Response to CA-IR-46 (Actual 2007 to date vs. August 2006 GWh Sales).

Please provide the following information regarding the "Comparison of 2007 vs. August 2006 Forecast Recorded GWh Sales" table:

- a. Updated information through April 2007 – Actual vs. Forecast.
- b. Monthly versus projected customer count data for each rate schedule.
- c. Explanations for any known causes of any material monthly fluctuations in actual GWh sales or actual customer count data.
- d. Explanations for any known causes of any material variances between actual GWh sales or actual customer counts, relative to the August 2006 Forecast.

CA-IR-190

Ref: T-2, page 3 (Annual Forecasts).

Please provide a complete copy of HECO's draft updated 2007 annual forecast now being developed by HECO personnel, as discussed with Mr. Willoughby on May 3, 2007.

Witness T-3 Mr. Young.

CA-IR-191

Ref: HECO-WP-301, pages 1, 10, 17, 22, 92, 106 and 134 (Interim Rate Increase Revenues).

The referenced workpapers in electronic form contain the amounts of Interim Increase as hard inputs with no supporting calculations. Please provide the calculations supporting these amounts.

CA-IR-192

Ref: HECO-WP-301, page 96 (Network Service Charges).

Please explain the perceived service quality differences associated with downtown network service and provide complete copies of all studies and other available data regarding outage frequency, outage duration, power quality differences or other service quality distinctions that explain the rationale behind charging the "Network Adjustment" to certain customers served on the network.

CA-IR-193

Ref: T-3, page 4, Response to CA-IR-50 (Rider Calculations).

Please explain whether or not HECO intends to update the rate case input values to reflect changes in rider participation for the test period and, if so, provide supporting calculations and

documentation for each such change at this time so the CA has an opportunity to review and respond to same.

Witness T-4 Mr. R. H. Sakuda.

CA-IR-194

Ref: HECO-WP-412, page 3 and pages 16 – 19.

The referenced workpapers contain information on Rider I.

- a. Please indicate what customers are associated with Rider I, and the terms and conditions of their interruptible agreement.
- b. Please explain how Rider I is modeled in the production simulation model.
- c. Please provide all agreements associated with Rider I, including all amendments, attachments and exhibits.

CA-IR-195

Ref: T-4, page 12, lines 24 – 25; HECO-WP-412, page 3 and page 17.

Page 12 of T-4 seems to omit Variable operation and Maintenance cost in calculating commitment and dispatch levels.

- a. Please provide the Variable O&M cost for all HECO generating units.
- b. If the Variable O&M cost is not included in the cost of any HECO generating unit please explain.

CA-IR-196

Ref: HECO-WP-412, page 3.

Please explain and provide all calculations for how the Operating Cost (\$/MWh) is calculated for each HECO generating unit and purchased power unit on the referenced workpaper.

CA-IR-197

Ref: HECO-WP-406, page 1 and HECO-WP-412, pages 18 – 19.

- a. HECO-WP-406, page 1 lists the operating minimum capacity for Kahe 5 as 49.8 MW. HECO-WP-412, page 18 lists the minimum as 50.4 MW. Please identify which minimum capacity was used in the production simulation.
- b. HECO-WP-406, page 1 lists the operating minimum capacity for Kahe 6 as 40.1 MW. HECO-WP-412, page 19 lists the minimum capacity as 49.8 MW. Please identify which minimum capacity was used in the production simulation.

CA-IR-198

Ref: Response to CA-IR-54, Part 6.

Please indicate if any HECO generating units or power purchases are restricted to specific operating hours. (i.e., limited to 6 am to 9 pm, etc.).

CA-IR-199

Ref: T-4, page 33, lines 8-9; T-4, page 35, lines 6 – 8; T-4, page 36, lines 14 – 18.

Please provide the Operations and Maintenance Agreement for the Barbers Point Tank Farm, Kahe Pipeline and Waiau Pipeline dated

December 14, 2004, including all amendments, attachments and exhibits.

CA-IR-200

Ref: T-4, page 33, lines 17-18.

Please provide the Barbers Point Tank Farm Services Agreement dated December 14, 2004, including all amendments, attachments and exhibits.

CA-IR-201

Ref: T-4, page 36, line 8.

Please provide the Facilities and Operations Contract between Chevron and HECO referenced in T-4, page 36, line 8, including all amendments, attachments and exhibits.

CA-IR-202

Ref: T-4, page 36, lines 1 – 19.

The referenced section of testimony indicates that HECO's cost estimate of the test year Pipeline Maintenance Expense was derived from terms set forth in the Facilities and Operations Contract and the Operations and Maintenance Agreement between Chevron and HECO.

Please provide the calculations used to adjust the Kahe Pipeline and Waiau Pipeline cost estimates to 2007 dollars.

CA-IR-203

Ref: T-4, page 36, line 21 – page 39, line 3.

The referenced section of testimony indicates that HECO's cost estimate of the test year Tank Farm Management Fee was derived from terms set forth in the Barbers Point Tank Farm Services Agreement with HECO and the Facilities and Operations Contract and the Operations and Maintenance Agreement between Chevron and HECO.

Please provide the calculations used to adjust the cost estimate to 2007 dollars.

CA-IR-204

Ref: T-4, page 39, line 5 – page 41, line 4.

The referenced section of testimony indicates that the total HECO fuel handling expense is applied on a prorated dollar amount basis to each of these components.

Please provide the calculations used to derive each component and the total fuel handling expense.

CA-IR-205

Ref: T-4, page 42, line 12 – page 43, line 8.

The referenced section of testimony indicates that HECO's cost estimate of the test year Petrospect expense was derived from terms set forth in a contract between Petrospect and HECO dated July 8, 2005.

- a. Please provide the calculations used to adjust the cost estimate to 2007 dollars.
- b. Please provide the contract between Petrospect and HECO dated July 8, 2005.

CA-IR-206

Ref: HECO-WP-412, page 27-37, Response to CA-IR-54.

The response to CA-IR-54 provided Pattern Files for H-Power, Kalaeloa, AES and distributed generators at HECO sites.

Please provide all pattern files associated with HECO generating units other than distributed generators.

CA-IR-207

Ref: HECO-WP-412, page 17.

Please explain how the commitment and dispatch penalty factors were derived for each HECO generating unit and power purchase. Please include all supporting documentation and calculations.

CA-IR-208

Ref: HECO-403, page 1 and HECO-WP-412, page 22.

HECO-403, page 1, line 5 indicates that the Net System Input is 8,109.2 GWh. HECO-WP-412, page 22 indicates that the total test year energy is 8,109.33 GWh.

Please indicate which number is the energy amount that was used in the production simulation model.

CA-IR-209

Ref: HECO-WP-412, page 24-26 and T-6, page 5, lines 8-13.

The spinning reserve input file H07TYD1.SPN shown in the referenced workpaper contains information for the first week of the month of January, and the spinning reserve criterion is shown to be 180 MW for every hour of the first week of January. T-6, page 5, lines 8-13 indicates that the spinning reserve criterion changes depending on the largest unit operating on the system.

Please provide the spinning reserve criterion for every hour of January through December of the test year.

CA-IR-210

Ref: HECO-WP-412, page 23.

The referenced workpaper contains the QLPU Input File H07TYD1.QLP.

- a. Please identify each generating unit that is associated with each Unit ID.
- b. Please explain how the numbers 1 through 10, listed under Unit Loading Point (MW) and under QLPU Capability (MW), are used by the P-Month production simulation.
- c. Please explain how the P-Month production simulation uses this file.

CA-IR-211

Ref: HECO-404, pages 1-2 and HECO-405, pages 2-3.

- a. Please identify the source of Fuel Consumption (Barrels) in column (A) of HECO-404, pages 1 and 2 and HECO-405, pages 2 and 3.
- b. Please provide all calculations used to derive the Fuel Consumption (barrels) in column (A) of HECO-404, page 1 and 2 and HECO-405, pages 2 and 3.

CA-IR-212

Ref: T-4, page 22, lines 16-17, T-4, page 25, lines 12-20.

Please provide all documentation and calculations that show the application of the calibration factors.

CA-IR-213

Ref: HECO-409, page 2.

Please identify the reference documents or calculations for MBtu Consumption and Net MWh Generation for every month for all HECO generating units in the referenced exhibit.

CA-IR-214

Ref: T-4.

Does the Company plan to update the HECO production simulation model during this proceeding? If so, can the Company provide what information will be updated and provide it at this time?

CA-IR-215

Ref: T-4, page 4, line 11.

The referenced testimony indicates that HECO is exploring alternatives other than the Kahe wind farm.

- a. Please explain and provide documentation on the other alternatives being explored.
- b. Please identify when these other alternatives may go into service.

CA-IR-216

Ref: T-4, page 5, lines 3 - 4.

Please explain how the photovoltaic project on the Archer substation rooftop was modeled in the production simulation model.

CA-IR-217

Ref: T-4, page 5, lines 5 - 9.

Please explain how renewables from IPPs were modeled in the production simulation.

CA-IR-218

Ref: HECO-402 and Response to CA-IR-53.

The response to CA-IR-53 contains fuel pricing information for each HECO generating plant for fuel from Chevron and Tesoro.

Please provide the percentage of fuel from Chevron and the percentage of fuel from Tesoro for each HECO generating unit.

CA-IR-219

Ref: T-4, page 9, lines 4 – 6, HECO-WP-412, page 19.

The referenced testimony indicates that the Company has 29.5 MW of distributed generators at substation sites. HECO-WP-412, page 19 indicates that there are 85.28 MW of capacity for the generating units labeled DG Sub.

- a. Are these intended to be the same DG units? If so, please explain.
- b. Please explain how the DG units were modeled in the production simulation.

CA-IR-220

Ref: HECO-WP-404, page 18 and HECO-WP-406, page 1.

HECO-WP-404, page 18 contains the HECO generating unit and purchased power operating minimum capacities and normal top load capacities from the 2005 calibration factor report. HECO-WP-406, page 1 contains the HECO generating unit and purchased power operating minimum capacities and normal top load capacities for test year 2007. Please see the table below. It appears that the operating minimum capacities and normal top load capacities have changed.

Generating Unit	HECO-WP-404, Page 18		HECO-WP-406, Page 1	
	Operating Minimum (MW)	Normal Top Load (MW)	Operating Minimum (MW)	Normal Top Load (MW)
Waiau 6	22.5	55.6	22.5	53.7
Waiau 7	32.7	88.1	32.7	83.2
Waiau 8	32.7	88.1	32.7	86.2
Waiau 9	13.9	51.9	6.0	52.9
Waiau 10	13.9	49.9	6.0	49.9
Kahe 1	27.7	88.2	32.6	82.3
Kahe 2	27.9	86.3	32.8	82.4
Kahe 3	27.8	88.2	32.7	86.3
Kahe 4	27.8	89.2	32.7	85.3
Kahe 5	50.4	134.7	49.8	134.7
Kalaeloa Additional Capacity	0.0	29.0	0.0	28.0

- a. Please explain why the above operating minimum capacities and normal top load capacities for the above generating units are different from HECO-WP-404, page 18 to HECO-WP-406, page 1.
- b. Please provide the operating minimum capacity and normal top load capacity for the above generating units that were used in the production simulation.

CA-IR-221

Ref: HECO-WP-406, page 2; T-4, page 19 lines 5 – 7; HECO-RWP-406, page 2 (Docket No. 04-0113).

The referenced section of testimony indicates that the heat rate constants provided on HECO-WP-406, page 2 are consistent with

the heat rate constants provided in the Company's last rate case, Docket No. 04-0113. Please see the table below:

Generating Unit	HECO-RWP-406, Page 2 (Docket No. 04-0113) B Coefficient	HECO-WP-406, Page 2 (Docket No. 06-0386) B Coefficient
Kalaeloa CT1	4.4109	4.4288
Kalaeloa CT2	4.4109	4.4288
Kalaeloa Additional Capacity	8.6710	8.6408

- a. Please explain why the B coefficient for the three Kalaeloa generating units has changed since the rebuttal testimony from HECO's last rate case.
- b. Please indicate which B coefficients were used in the production simulation for the three Kalaeloa generating units.

CA-IR-222

Ref: Response to CA-IR-54 and HECO-WP-412, pages 32 – 37.

The response to CA-IR-54 indicates in Part 4 that the Distributed Generators are modeled by using a pattern file to approximate the number of hours that the units will run during the test year. The DG pattern file was provided on HECO-WP-412, pages 32 – 37.

- a. Please explain how the number of hours that the DG units will run was determined, including all calculations and supporting documentation.
- b. Please explain why the DG units were allowed to run during the specific hours listed in the DG pattern file.

Witness T-5 Mr. Daniel S.W. Ching.

CA-IR-223

Ref: T-5, page 3, line 25 – page 4, line 2.

- a. Please identify the second order equation that was derived from the contractual payment provisions for the energy cost and variable O&M cost for the Kalaeloa and AES Hawaii purchases.
- b. Please provide all supporting documentation and calculations that were used to derive this equation.

CA-IR-224

Ref: T-5, page 2, lines 4-14.

Please provide all pages to the Purchase Power Agreement with Chevron, including all amendments, attachments and exhibits.

CA-IR-225

Ref: T-5, page 2, lines 4-14.

Please provide all pages to the Purchase Power Agreement with Tesoro, including all amendments, attachments and exhibits.

CA-IR-226

Ref: T-5, page 5, lines 4 – 7, HECO-WP-412, pages 20 and 27.

The referenced section of testimony indicates that H-Power is shut down for routine maintenance every year, HECO-WP-412, page 20 does not include H-Power in the Thermal Maintenance Summary input to the production simulation. The pattern file for H-Power, Pattern 1 found on HECO-WP-412, page 27, indicates that

H-Power has no maintenance outages as described in the referenced testimony.

- a. Were maintenance outages for H-Power modeled in the production simulation?
- b. If so, please explain how the maintenance outages for H-Power were modeled in the production simulation.

Witness T-6 Mr. A. Giovanni.

CA-IR-227

Ref: Response to CA-IR-37, Attachment 1, pages 44 and 45 (Figures 9 and 10: Lost MWH).

Please provide the following information:

- a. Input data and adjustments used to prepare these tables, including normalization adjustments made "for 2004 and 2005 Events at Waiau 8, 9 and Kahe 5, 6" (Excel file format, if available).
- b. Updated calculations and Figures 9 and 10 to include actual 2006 information.
- c. Estimated Lost MWH for test year 2007, based upon scheduled outages and an assumed 5 percent EFOR rate.
- d. State and explain HECO's objective management target(s) for Lost MWH in a representative year.

CA-IR-228

Ref: Response to CA-IR-37, Confidential Attachment 3, pages 18 and 19 (Figures 9 and 10: Historical EAF/EFOR Performance).

Please provide the following information:

- a. Input data and adjustments used to prepare these tables (Excel file format, if available).
- b. Updated calculations and Figures 9 and 10 to include actual 2005 and 2006 information, as available.
- c. State and explain HECO's objective management target(s) for Equivalent Availability and EFOR in a representative year.

CA-IR-229

Ref: Responses to CA-IR-37, Attachment 1 and CA-IR-64, Attachment 2 (Lost MWH).

Please provide the following information:

- a. For IR-64, Attachment 2, provide a breakdown of the 2/14/2006 Rev outage schedule for 2007 by unit, indicating how the PO, D4 and MO lost MWH were calculated for the test year.
- b. Information required to reconcile annual lost MWH amounts shown in CA-IR-64, Attachment 2 for historical periods 2001 through 2005 to the comparable Figure 9 calculations of Lost MWH at CA-IR-37, Attachment 1, page 38.
- c. State whether or not (and why) CA-IR-64 Lost MWH calculations have been "normalized for 2004 and 2005

events at Waiau 8, 9 and Kahe 5, 6 as presented in Figure 10 of CA-IR-37, Attachment 1.

CA-IR-230

Ref: Response to CA-IR-63 (Generating Unit Utilization).

According to the response, all three measures of unit utilization appear to have peaked in 2004 (capacity factor, starts, operating hours) and declined thereafter. Please provide the following information:

- a. Explain whether moderating electric sales growth rates, better performance by IPP units (AES, HPOWER, Kalealoa) and/or other (identified) factors are contributing to these changes.
- b. Provide test year simulation values for capacity factor, starts and operating hours for each unit, and
- c. Explain any individually significant changes in the values provided in your response to part (b) of this information request and the data tables provided for each unit within CA-IR-63.

CA-IR-231

Ref: Response to CA-IR-64, Attachment 1 (Long Range Outage Schedule).

Please provide the following information regarding the HECO Long Range Planning Schedule for generating unit outages:

- a. Define the scope of work for each of the listed types of work; BlrStd, BlrCC, HP, LP, GEN for the steam units, Major, HotGas, CI, Gen for combustion turbines.
- b. Provide an order of magnitude estimate of outage duration for each of the listed types of work; BlrStd, BlrCC, HP, LP, GEN for the steam units, Major, HotGas, CI, Gen for combustion turbines.
- c. Provide the desired number of years interval for each of the listed types of work per unit; BlrStd, BlrCC, HP, LP, GEN for the steam units, Major, HotGas, CI, Gen for combustion turbines.
- d. Explain the X, F and I codes used in certain cells of the table.
- e. Provide information needed to populate the "No. Majrs" row at the top of the table for all years.
- f. Provide information needed to populate the "HECO Wks" row at the top of the table for all years.
- g. Explain why 2007 is assumed to represent a normal level of work, given the maintenance intervals stated in response to part c. of this information request and the types of work planned in the test year.

CA-IR-232

Ref: Response to CA-IR-72, Attachment 2 (Operation Div. Hours).

Please explain for each station all the known reasons why the Company believes that test year "2007 Budget" total hours (Overtime plus Straight Time) should be significantly higher than the annual actual hours that were required to maintain 24x7 staffing at the Company's generating stations throughout 2006:

- a. PIK Kahe in 2006 was 116,627 hours, versus test year 124,982 hours.
- b. PIH Honolulu in 2006 was 50,171 hours, versus test year 54,828 hours.
- c. PIW Waiau in 2006 was 128,739 hours, versus test year 135,270 hours.
- d. Provide copies of all analyses, workpapers, calculations and supporting documents associated with your response to parts a. through c. of this information request.

CA-IR-233

Ref: Response to CA-IR-72, Attachment 2 (Maintenance Labor Hours).

Please explain for each station all the known reasons why the Company believes that test year "2007 Budget" total hours (Overtime plus Straight Time) should be significantly higher than the annual actual hours that were required to adequately maintain the Company's generating stations throughout 2006:

- a. PIL Kahe in 2006 was 59,482 hours, versus 66,320 test year hours.
- b. PIN Honolulu in 2006 was 16,490 hours, versus test year 24,540 hours.
- c. PIX Waiau in 2006 was 61,346 hours, versus test year 67,046 hours.
- d. PIT Traveling Maintenance in 2006 was 157,098 hours, versus test year 185,484 hours.
- e. Provide copies of all analyses, workpapers, calculations and supporting documents associated with your response to parts a. through d. of this information request.

CA-IR-234

Ref: Response to CA-IR-74, Attachment 10 (Maintenance Labor + Outside Service Supplementary Maintenance Labor).

According to the Total column of Attachment 10, combined actual internal and contract maintenance labor costs have increased at a rate of 10% to 12% per year in 2004, 2005 and 2006. However, for the test year the proposed combined maintenance labor costs are projected to grow by 16% over 2006 actual levels. Please respond to the following:

- a. Provide the most detailed available explanation of work requirements known to be increasing at an accelerating percentage in 2007, relative to all prior years shown.

- b. Identify and quantify each incremental work project or process anticipated to be done in 2007 that was deferred from prior years.
- c. Explain and quantify each known specific instance where work performed in prior years was not sufficient to adequately maintain the Company's generating units and describe additional efforts projected by each RA work group in 2007 to remedy such deficiencies.

CA-IR-235

Ref: Response to CA-IR-76, (Lower Priority Deferred Work).

According to the response, the listed cathodic protection and spalling repairs at page 52 of T-6 were deferred in prior years and "will not likely be done in 2007." Please provide the following information with respect to this statement:

- a. Explain the considerations that make this type of work discretionary, indicating impacts upon reliability, employee safety, asset protection and any other criteria.
- b. Which, if any, of the projects were included within the 2005 rate case expense projections?
- c. Explain how the Company creates and prioritizes its list of projects and other work orders at each generating station.
- d. Provide a detailed listing of all projects and other maintenance work orders at each generating station that

were determined to be lower priority and were budgeted expenditures, but were ultimately not incurred as expenses in the year 2005.

- e. Provide a detailed listing of all projects and other maintenance work orders at each generating station that were determined to be lower priority and were budgeted expenditures, but were ultimately not incurred as expenses in the year 2006.

CA-IR-236

Ref: Responses to CA-IR-1, HECO T-6, Attachment 12, CA-IR-83 spreadsheets (Labor Budget Overtime Assumption).

According to the Production Department Labor input spreadsheets, a uniform 15 percent overtime labor hours input assumption appears to have been applied to each of the RA groups for the test year. Please provide the following information with respect to this assumption:

- a. Confirm that 15 percent overtime hours was the standard overtime assumption for the test year, or identify where any different assumption was employed.
- b. Provide copies of all studies, reports, analyses, workpaper and other documents associated with or supportive of the development of the 15 percent assumed overtime input value.

- c. For each RA, explain the reasons why test year overtime hours were not reduced proportionately for each added employee position, to account for the filling of vacancies that existed historically or to account for the ability of employees in newly created positions to displace overtime historically required.

CA-IR-237

Ref: HECO T-6, page 67, CA-IR-2, HECO T-6, Attachment 13E, CA-IR-3, Attachment 1 (DG Units).

The testimony describes DG unit resources and their in-service dates, while IR-2, Attachment 13E and IR-3 Attachment 1 contains documentation supportive of test year DG expenses. Please provide the following information with respect to this data:

- a. Actual monthly lease payments for each of the DG units, based upon the actual achieved in-service dates, with a comparison to the amounts of such payments actually included in test year monthly non-labor expenses.
- b. Information required to tie together the 89 pages of data in Attachment 13E, indicating total expenses by EE included in the response to CA-IR-3, Attachment 1, page 2, with references into such supporting data.
- c. Explain all assumptions made regarding maintenance requirements associated with each DG unit for test year budgeting purposes.

- d. Provide actual incurred monthly DG maintenance expense by unit in a format comparable to the response provided to part c. of this information request.
- e. Provide actual plant investment costs incurred by HECO in connection with each DG unit, indicating the dates when such costs were placed in service and closed to plant accounts.
- f. Explain which of the plant costs in your response to part e. of this information request were included in beginning and end-of-test year plant in service balances.

CA-IR-238

Ref: Response to CA-IR-2, HECO T-6, Attachment 7, page 2 (Environmental Management System).

According to the response, \$100,000 is included for EDSG software and services in the test year. Please provide the following information:

- a. A complete copy of the "Budgetary estimate provided by EDSG."
- b. Explain the implementation plan and schedule for the entire system, explaining the purpose and benefits associated with each of the five "modules."
- c. Provide a long term budget indicating the anticipated capital and expensed costs in each future year, by module,

indicating how/if costs will be allocated to HELCO and/or MECO.

- d. Provide actual expenditures, to date, by RA, EE and activity.
- e. Provide complete copies of all studies, analyses, workpapers and other documents supportive of the Company's decision to deploy the Environmental Management System.

CA-IR-239

Ref: Response to CA-IR-2, HECO T-6, Attachment 12B, page 2 (Power Purchase Division Consulting and Legal Expenses).

According to the Attachment, \$375,000 has been included in the test year forecast for "wind farm proposals, other renewable energy proposals and other IPP proposals" as well as for (implementing the competitive bid process." Please provide the following:

- a. Provide a summary of historical actual expenses for these activities in each year 2002 through 2006, by RA, EE and Activity, explaining each individually significant project contained within such data.
- b. Provide year-to-date actual 2007 expenses for each listed activity on Attachment 12B, page 2.
- c. Explain each of the known projects/activities that will result in expenses being incurred by HECO in 2007 that are not reflected in your response to part b. of this information request.

- d. Provide complete copies of all documents associated with your response to part (c) of this information request.

CA-IR-240

Ref: Response to CA-IR-2, HECO T-6, Attachment 13D, pages 3-6 (Kahe Station O&M Priority List).

- a. Please identify each of the priority list items that are not included in test year forecasted Kahe maintenance expenses (if any), indicating the reason for exclusion.
- b. For each listed item that individually exceeds \$50,000, please describe the work that is planned to be done and state the approximate date when the same work was last required (if available) at the station.
- c. Provide the monthly amounts expended to date in 2007 for each listed project.
- d. Explain why all of the listed discretionary projects, even those of the lowest priority, are fully budgeted to be performed in the test year, rather than deferring any of the planned work to later years.
- e. List and describe each listed project that the Company has decided to not undertake and complete in 2007.

CA-IR-241

**Response to CA-IR-2, HECO T-6, Attachment 13K, pages 3-4
(Waiau Station O&M Priority List).**

- a. Please identify each of the priority list items that are not included in test year forecasted Waiau maintenance expenses (if any), indicating the reason for exclusion.
- b. For each listed item that individually exceeds \$50,000, please describe the work that is planned to be done and state the approximate date when the same work was last required (if available) at the station.
- c. Provide the monthly amounts expended to date in 2007 for each listed project.
- d. Explain why all of the listed discretionary projects, even those of the lowest priority, are fully budgeted to be performed in the test year, rather than deferring any of the planned work to later years.
- e. List and describe each listed project that the Company has decided to not undertake and complete in 2007.

CA-IR-242

**Ref: Response to CA-IR-2, HECO T-6, Attachment 13F,
pages 3-4 (Honolulu Station O&M Priority List).**

- a. Please identify each of the priority list items that are not included in test year forecasted Honolulu maintenance expenses (if any), indicating the reason for exclusion.

- b. For each listed item that individually exceeds \$50,000, please describe the work that is planned to be done and state the approximate date when the same work was last required (if available) at the station.
- c. Provide the monthly amounts expended to date in 2007 for each listed project.
- d. Explain why all of the listed discretionary projects, even those of the lowest priority, are fully budgeted to be performed in the test year, rather than deferring any of the planned work to later years.
- e. List and describe each listed project that the Company has decided to not undertake and complete in 2007.

CA-IR-243

Ref: Response to CA-IR-2, HECO T-6, Attachment 13I, pages 10-68 (Test Year Projected Overhaul Materials/Services).

The Attachment provides estimated EE 201 materials and EE 501 outside services expense estimates for overhauls in the test year.

Please provide the following information with respect to this data:

- a. Actual EE 201 (materials) PIT expenses in each of the years 2001 through 2006 and projected test year 2007, by activity (257, 258, 259, 260, 261, 262, 272, 273 and 274).
- b. Actual EE 501 (outside services) PIT expenses in each of the years 2001 through 2006 and projected test year 2007, by activity (257, 258, 259, 260, 261, 262, 272, 273 and 274).

- c. To the extent historical average and trended expenses provided in response to parts a. and b. of this information request include unusual fluctuations or extraordinary activity/expense in any particular year, please explain the causes for such activity/expense fluctuations.
- d. To the extent historical average and trended expenses provided in response to parts a. and b. of this information request do not compare reasonably to test year projected expenses, please explain each additional consideration that HECO believes is supportive of its proposed expense level.

CA-IR-244

Ref: Response to CA-IR-2, HECO T-6, Attachment 13I, pages 10-68 (Test Year Projected Overhaul Materials/Services).

The Attachment provides estimated EE 201 materials and EE 501 outside services expense estimates based upon budgeted overhauls schedule in or near the test year. Please provide the following information with respect to this data:

- a. Please confirm that the estimated costs are based upon the Company's planned overhaul schedule at a specific point in time, based upon standardized work scope estimates, as well as known specific corrective work anticipated for each unit.

- b. State the revision date of the overhaul schedule that is associated with the projected expense levels and provide copies of the schedule, if it is other than HECO-608.
- c. Please confirm that no adjustments were deemed necessary or made by HECO to the test year overhaul schedule, planned work scoping or estimated expenses as they appear in Attachment 13I.
- d. Please confirm that estimated materials and outside services expenses were prorated on a monthly basis to recognize portions of the costs associated with certain scheduled overhauls that were expected to occur near the beginning or beyond the end of the test year.
- e. If anything but unqualified confirmation is provided in your responses to parts a., c. and d. of this information request, please explain and provide references or additional information to support your response.
- f. Provide the number of full and partial (pro-rated) outages that are budgeted for the test year in each of the following categories:
 - 1. Boiler Standard;
 - 2. Boiler Chemical Clean;
 - 3. HP Turbine;
 - 4. LP Turbine;

5. Generator;
6. CT major overhaul;
7. CT hot gas overhaul; and
8. CT inspection.

CA-IR-245

Ref: HECO-629, (R&D Expenses).

The referenced 13-page document summarizes elements of R&D expense charged to production O&M accounts. Please provide the following additional information:

- a. Comparable historical actual expenses incurred by HECO (net of any allocations to HELCO/MECO) in each year 2003 through 2006 in each of the following categories:
 1. Local EPRI matching funds.
 2. Renewable initiative funds.
 3. Biofuels initiative.
 4. Electronic shock absorber.
 5. Sun Power for Schools.
- b. Actual monthly 2007 expenditures to date incurred by HECO (net of any allocations to HELCO/MECO) in each of the following categories:
 1. Local EPRI matching funds;
 2. Renewable initiative funds;
 3. Biofuels initiative;

4. Electronic shock absorber; and
 5. Sun Power for Schools.
- c. State and explain all reasons for any major variations in spending compared to annual historical levels, by category.
 - d. State and explain all reasons for any major variations between planned test year spending compared to monthly spending levels to-date in 2007.
 - e. Provide a detailed statement of the current status and Company plans for the ESA demonstration unit.

CA-IR-246

Ref: Response to CA-IR-2, HECO T-6, Attachment 7B, page 1 (Environmental Outside Services).

- a. Please provide a complete copy of existing contracts or other commitments made by HECO for services in 2007 for EE 508 estimated expenses in each category of activity listed on page 1.
- b. Provide actual annual expenses incurred by HECO in each of the years 2003 through 2006 for services in each of the test year EE 508 estimated expenses by category of activity listed on page 1.
- c. Provide actual annual expenses incurred by HECO in each month of 2007, to date, for services in each of the test year EE 508 estimated expenses by category of activity listed on page 1.

- d. Explain and quantify any changes in the level of spending, timing or scope of activities associated with the test year 2007 EE 508 estimated expenses by category of activity listed on page 1.

CA-IR-247

Ref: CA-IR-2, HECO T-6, Attachment 9, pages 2-6 (ITS Allocations).

Please provide the following information regarding test year proposed ITS charges to the Production Departments:

- a. Provide monthly actual charges to date in 2007 to production expense accounts for RA=PEZ.
- b. Explain the causes for any significant variances in relation to the projected test year monthly spending amounts.
- c. Explain and provide updated calculations supporting any revisions to be made by the Company regarding ITS expenses and allocations.

CA-IR-248

Ref: CA-IR-2, HECO T-6, Attachment 12A (Vehicle Expense).

- a. Please state all assumptions and provide calculations of the various test year hourly rates used to apportion vehicle expenses among RA's and expense accounts.
- b. Provide a summary of the distribution of total test year vehicle clearing costs, indicating the portion charged to

expense accounts by NARUC and RA as well as the portion charged to capital and other accounts.

CA-IR-249

Ref: HECO-608, HECO-WP-412, page 20.

The outage start dates and durations on HECO-608 do not correspond with the outage start dates and durations on HECO-WP-412, page 20. Please see the table below.

Generating Unit	HECO-WP-412, Page 20		HECO-608	
	Outage Start Date	Duration (days)	Outage Start Date	Duration (days)
Honolulu 8	4/15/07	13		
Honolulu 8	11/30/07	32	12/3/07	71
Honolulu 9	1/1/07	12		
Honolulu 9	11/4/07	13	10/16/06	91
Waiau 3	4/1/07	13	4/3/07	7
Waiau 4	6/17/07	13		
Waiau 5	9/16/07	62	5/28/07	5
Waiau 5			10/1/07	63
Waiau 6	8/12/07	13		
Waiau 7	2/24/07	70	2/12/07	71
Waiau 7	12/9/07	20		
Waiau 8	1/14/07	13	1/15/07	13
Waiau 8			12/3/07	13
Waiau 9	11/25/07	13	5/14/07	34
Kahe 1	1/1/07	40	10/30/06	99
Kahe 2	3/11/07	20	3/12/07	20
Kahe 3	6/9/07	91	6/18/07	91
Kahe 4	10/20/07	14		
Kahe 5	5/6/07	20	3/15/07	6
Kahe 6	5/27/07	12	4/30/07	14

Please identify the maintenance and overhaul outage start dates and durations for all HECO generating units that were used in the HECO production simulation for the test year.

CA-IR-250

Ref: HECO-608.

The referenced exhibit contains outage dates and durations for HECO generating units and purchased power maintenance outages.

- a. Please explain how the MW loss value in the Remarks column on HECO-608 was derived.
- b. Please explain how the MW loss value in the Remarks column of HECO-608 was used in the production simulation model.
- c. Please provide a comprehensive list of all maintenance and overhaul outages for all purchased power units, and provide the start and end dates of each outage and the available capacity from each unit during the outage that was used in the production simulation.

Witness T-8 Mr. Yamamoto.

CA-IR-251

Ref: HECO T-8, page 3 (Performance Metrics).

At page 3, Mr. Yamamoto lists the activities undertaken within the customer accounts block. Please provide the following information regarding the referenced activities:

- a. List and describe the performance metrics that are monitored by management to evaluate how well customers are being served by HECO.

- b. For each of the metrics listed in your response to part a. of this information request, provide comparable periodic data for all available periods of 2004, 2005, 2006 and 2007, to date.
- c. Explain any unusual fluctuations are trends in the quantitative data provided in your response to part b. of this information request, indicating any measures taken or planned to improve performance.
- d. State and quantify the Company's goals and objective regarding each of the performance measures used by management to track performance.

CA-IR-252

Ref: T-8, page 5, lines 22-24, HECO-804 (Filling Vacant Positions).

According to the testimony, "The filling of these vacant positions for replacement of staff will allow the Company to continue to maintain its daily operations and provide for new or additional work and projects during the test year." Please provide the following information:

- a. Confirm that each of the vacant positions have been approved for hiring and explain the efforts undertake by HECO to fill such positions.
- b. Please provide a more detailed breakdown by position (in the format of CA-IR-1, Attachment 2, pages 43-36) of the

values summarized on HECO-804 and provide monthly actual recorded staffing in each position for all available months subsequent to September 2006.

- c. Provide a monthly statement of temporary staffing used to augment customer accounting work requirements in each month of 2006 and 2007, to date.
- d. Explain the Company's policies regarding the use of temporary staffing and how temporary staff counts in your response to part (c) of this information request relate to any vacancies indicated in the response to part d..
- e. Explain and provide copies of information relied upon by management to determine that filling of vacancies is necessary to "maintain its daily operation."
- f. Identify and describe with particularity the efforts planned in connection with identity theft measures, revenue protection processes and any other discrete new projects adding to work requirements.

CA-IR-253

Ref: Response to CA-IR-3, HECO T-8, Attachment 1 (Staffing Adjustments).

Please provide comparable actual data for all available months to replace the estimated information set forth in calculations supporting the Company's proposed budget adjustment, indicating

actual amounts spent on temporary personnel and actual positions vacant by month.

CA-IR-254

Ref: T-8, page 6, line 7 (Meter Tampering).

- a. Has HECO experienced any significant amounts of meter tampering in 2005, 2006 or 2007, to date?
- b. If yes, please explain and quantify the extent of this problem, indicating any individual cases of consequence (timing, kwh, lost revenues), and describe all planned measures to "safeguard against actions such as meter tampering."

CA-IR-255

Ref: T-8, page 12, lines 1-6; CA-IR-114; Response to CA-IR-1, HECO T-8, Attachment 2, pages 2-41 (Labor Input Sheets-CIS Deferrals).

Please provide the following additional information:

- a. Identify each of the "seven clerical and administrative staff who are dedicated...."
- b. Provide a summary of the hours by position projected to be charged to the CIS project for deferral, rather than expense treatment.
- c. Confirm that CIS deferred labor hours and costs are not included in test year expenses.

- d. Identify and describe the criteria/procedures employed to isolate employees or activities eligible for deferral as part of the CIS project.

CA-IR-256

Ref. CA-IR-120, (Postage Expenses).

The referenced document refers to historically forecasted cost amounts for postage. Please provide the following information:

- a. Actual postage expense incurred by HECO in each year 2005, 2006 and 2007, to date.
- b. Allocation data used to apportion postage costs between HECO, HELCO and MECO in each historical year 2005 and 2006.
- c. Approximately what portion of HECO mailings were first class versus presorted first class in 2006?

CA-IR-257

Ref: CA-IR-2, HECO T-8, Attachment 2, page 2 (CSI Revenues).

The referenced document indicates projected test year revenues and expenses for customer payment insurance. Please provide the following:

- a. Detailed description of the terms and conditions of the CSI offering made by HECO.
- b. Annual CSI participation statistics, revenues and expenses for each year from 2004, 2005, 2006 and 2007, to date.

- c. Explain whether HPUC approval was ever requested or received regarding the CSI program, indicating by reference any Commission Dockets or filings that were made.

CA-IR-258

Ref: CA-IR-2, HECO T-8, Attachment 2, pages 2, 4 and 6 (Materials and Services Cost Estimates).

The referenced documents contain test year projections for Customer Accounting supplies and outside services. Please provide supporting documentation for current unit prices as well as any available "price times quantity" calculations supportive of the following individual line items, indicating whether any further adjustment of the projected amounts is warranted at present unit price levels:

- | | | |
|----|------------------------|------------|
| a. | Standard Register-HECO | \$78,436. |
| b. | Temp Services | \$38,400. |
| c. | Bill Envelopes | \$132,000. |
| d. | Maint. Wausau | \$ 76,300. |
| e. | O/S-BOH ABP | \$ 74,000. |
| f. | O/S-BOH Rtn Check Fee | \$ 36,000. |
| g. | O/S Checkfree | \$ 86,400. |
| h. | O/S Temp Hire | \$ 57,000. |
| i. | Pmt. Envelopes | \$117,600. |
| j. | Rev Pro Consultant | \$ 96,000. |

- k. Provide comparative data quantifying actual annual expenses for each of the line items listed as items a. through j. for each of the years 2004 through 2006.

Witness T-9 Mr. Hee.

CA-IR-259

Ref: T-9, page 61, lines 17-19, HECO-937, page 1, and HECO-WP-936, pages 3-4.

HECO-WP-936, page 4 indicates that the total Central Station fuel consumed and the percent of Central Station sales are used to calculate the HECO Other Sales Heat Rate. HECO-WP-936, page 3 indicates that LSFO and Diesel make up the Central Station generation.

Please explain the basis for the Central Station being represented twice in the weighted efficiency factors on HECO-937, page 1, once as the LSFO and Diesel fixed efficiency factors and again as the other fixed efficiency factor.

CA-IR-260

Ref: HECO-934, page 1 and HECO-936, pages 1-2.

Please provide supporting documentation for the Loss Factor found on HECO-934, page 1, line 53, HECO-936, page 1, line 34, and HECO-936, page 2, line 67.

CA-IR-261

Ref: Response to CA-IR-54, Part a.

HECO's response to CA-IR-54 part (a) indicates that pattern files 2 through 4 represent the maintenance schedule for Kalaeloa.

Please indicate which Kalaeloa generating unit is represented by which pattern file.

CA-IR-262

Ref: T-9, page 24, line 5; Response to CA-IR-125 (Hoa Hana).

The referenced publication is referenced as one of the responsibilities of the Corporate Communications Division. Please provide the following information:

- a. Provide an estimate of the actual labor hours and direct non-labor costs incurred by HECO to create and distribute this publication.
- b. Provide an estimate of the costs of this publication in the test year.
- c. What approximate share, if any, of the total costs of creating and distributing this publication were borne by HEI or other non-utility subsidiaries of HEI in 2005 and in 2006?

CA-IR-263

Ref: T-9, page 4; lines 11-19; HECO-904; Responses to CA-IR-122, CA-IR-130 (DSM Classifications).

According to the testimony, "Because the Commission's decision regarding the appropriate DSM program cost recovery mechanism is pending, for the purposes of this proceeding, the company is

using the method of cost recovery that is currently in place; namely, that DSM program costs currently being recovered in base rates continue to be recovered in base rates, and incremental DSM program costs currently being recovered through the DSM Surcharge continue to be recovered through that surcharge." In response to CA-IR-122 and CA-IR-130, this position is modified somewhat, including a statement, "the Company uses the following decision and orders ("D&O") to determine the classification of DSM costs for either base rates or surcharge recovery." Please provide the following:

- a. For each past Commission D&O relied upon to classify expenses between base rates and surcharge recovery, provide pinpoint citation into the language relied upon by HECO to consider certain of its labor positions and related labor costs as "incremental" and eligible for surcharge recovery.
- b. For each past Commission D&O relied upon to classify expenses between base rates and surcharge recovery, provide pinpoint citation into the language relied upon by HECO to consider certain of its non-labor costs as "incremental" and eligible for surcharge recovery.
- c. To the extent HECO has based its "incremental" DSM cost classifications upon previously submitted DSM program

budget estimates and underlying budget staffing assumptions, rather than explicit Commission language regarding cost classification definitions, please provide the estimates and explain how they relate to each of the "incremental" positions listed in HECO-904.

- d. Provide an estimate of the approximate dates when each of the positions listed in HECO-904 under "Base Rates" was initially approved and filled, indicating whether each position was created to support any particular DSM related responsibilities.
- e. Provide an estimate of the approximate dates when each of the positions listed in HECO-904 under "Incremental" was initially approved and filled, indicating whether each position was created to support any particular DSM related responsibilities.
- f. At page 2 of its response to CA-IR-122, the Company quotes from the EE Docket D&O to support a revision to its filing to include additional labor costs in base rates. Please provide the following information:
 - 1. Explain whether HECO or other parties to the EE docket were advocating a reclassification of labor costs, so that all labor costs would be recovered solely through base rates.

2. Provide citation into any evidence or other information relied upon by HECO to determine that the EE Docket D&O intended to change the cost recovery mechanism for DSM labor costs from existing procedures.
- g. Explain how the Company intends to adjust its staffing shown in HECO-904 to transition toward independent (rather than utility administration) administration of DSM programs in 2009, indicating how many of the 11 positions now in base rates (plus 2 positions to be added per CA-IR-122) will be needed under a non-utility market structure.
- h. If HECO is allowed to include 11 or more DSM-related employee positions in its base rate revenue requirement in this proceeding, and DSM is moved outside of utility administration starting in 2009, how does HECO propose to avoid over-recovery of labor costs for DSM positions no longer required after 2008?

CA-IR-264

Ref: T-9, page 48; Response to CA-IR-130 (DSM Reconciliation Clause).

According to the response, "HECO will be eliminating the DSM Reconciliation Clause from its test year proposal." Please provide the following:

- a. Please explain all reasons why HECO believes it is not necessary to have some reconciliation device in place to account for changes in expenses arising from implementation of the provisions of the EE Docket D&O that occur between rate cases.
- b. Does HECO object to the utilization of the existing IRP/DSM surcharge mechanism to account for changes in its overall expenses as a result of transition away from the utility market structure, as envisioned within the EE Docket?
- c. Please explain your response to part b. of this information request, with illustrative calculations of how future base rate and incremental DSM costs may wind down for all but the continuing load control programs, and how rate changes to customers should be adjusted for such changes.

CA-IR-265

Ref: Response to CA-IR-1, T-9, page 3 (Staffing-5 Vacant Positions).

According to the response, "The reason for the higher staffing forecast is because the staffing levels were low at the time the forecast was prepared due to five vacant positions." Please provide the following:

- a. Describe and provide documents indicating any significant amounts of work not completed as a direct result of the vacancies that existed.

- b. Confirm that no studies, analyses, workpapers or other information was provided in testimony or in your response to support the need for additional staffing of the vacant positions.
- c. If your response to part b. is anything but an unqualified confirmation, provide copies of or citation to all studies, analyses, workpapers or other information intended by HECO to support the need for additional staffing.
- d. Explain whether the Company has considered gradually reducing its DSM-related headcounts to prepare for the revised market structure prescribed by the Commission in the EE Docket, indicating all steps taken to date.

CA-IR-266

Ref: Response to CA-IR-1, HECO T-9, Attachments A through D (Labor Budget Input Sheets).

Please provide the following:

- a. A list of each position charging time to either activity 713 Administer & Implement DSM Programs – Base or activity 714 Administer & Implement DSM Programs – Incremental.
- b. For each position listed in your response to part a. of this information request, please provide:
 - 1. Test year hours charged to 713.
 - 2. Test year hours charged to 714.

3. Explain the basis for the labor hour distribution and provide specific pinpoint reference to past Commission orders and any other documents or calculations supportive of the distribution of hours for the position.
 4. Reference to the page(s) within CA-IR-1 Attachments where the labor cost distribution is documented.
- c. Provide existing and revised 2007 forecast labor input sheets for the two regular employees HECO now wishes to add for DSM program-related labor costs (CA-IR-130).

CA-IR-267

Ref: T-9, pages 36-37, 41; Response to CA-IR-122 (Informational Advertising).

According to the testimony at page 41, "the Account 911 - Informational Advertising test year expense estimate includes the additional \$750,000" that was previously proposed by HECO within the RCEA program. Please provide the following:

- a. Confirm that \$750,000 of informational advertising should be removed from the Company's revenue requirement, for recovery through the DSM surcharge as part of the RCEA Program incremental costs, or explain why such removal is inappropriate.
- b. Explain whether and why HECO should be allowed any additional informational advertising budget in base rates,

beyond the funding permitted for the RCEA program in the EE Docket.

- c. Provide complete copies of all studies, reports, analyses, workpapers, projections and other documents associated with or supportive of your response to part bb of this information request.
- d. Provide an itemization of the \$1 million in advertising "using shareholder funds" as referenced at page 37, indicating the amounts by entity and the NARUC accounts charged.
- e. Provide copies of advertising (print or scripts for radio/TV ads) associated with the \$1 million in advertising "using shareholder funds" as referenced at page 37.

CA-IR-268

Ref: Response to CA-IR-2, HECO T-9, Attachment B, page 14 (IRP Forecasts and Budgets).

Please provide a schedule containing the same level of detail, but substituting 2005 and 2006 actual expenses in place of the budgeted values shown.

CA-IR-269

Ref: Response to CA-IR-3, HECO T-9, (CIDLC Modifications).

Please explain the assumptions involved and provide complete calculations and supporting documentation for the additional \$148,416 adjustment being proposed.

CA-IR-270

Ref: Response to CA-IR-2, HECO T-9, Attachment B, page 17 (IRP Outside Services).

Please explain the current status of the "Commercial End Use Survey" and "Market Potential Study" projects and provide a complete copy of all consulting RFP, contracts and other documents indicative of HECO progress in conducting such work.

CA-IR-271

Ref: Response to CA-IR-2, HECO T-9, Attachment B, page 21 (Below the Line Activities).

Please provide the following information:

- a. A detailed description of each element of the Company's "BTL Activities" and explain the procedures used to assign or allocate employee labor and non-labor expenses to such activities.
- b. A summary of total annual revenues, expenses, gross profits and investment associated with each element of the Company's "BTL Activities."
- c. State whether HECO has ever sought or obtained Commission approval for its "BTL Activities," indicating the Dockets involved (if any).
- d. What criteria are employed by the Company to determine when/if a particular activity is to be treated below the line?

- e. Provide complete copies of any documents associated with or supportive of your response to part d. of this information request.

Witness T-10 Ms. Nanbu.

CA-IR-272

Ref: HECO T-10 Response to CA-IR-2, Attachment 13, page 3 (ITS Costs).

Note C on the referenced document indicates that the 2007 test year forecast of \$128,000 includes \$100,000 allowance "for one-time consulting charges to establish a new bill printing and mailing process using the new CIS billing system capabilities and remote printing options which were researched in 2006." Please provide the following:

- a. Has HECO officially committed to the implementation of the remote printing and billing process referenced above? Please explain.
- b. If the response to part a. above is that HECO has yet to decide whether to commit to remote printing and billing, please explain and describe the planned timeline on which such a decision will be made.
- c. Please confirm that the above quote accurately characterizes the consulting charges as "one-time." If this cannot be confirmed, please explain.

- d. Does HECO expect that it will incur this \$100,000 of consulting charges to establish a new bill printing and mailing process on a recurring annual basis? Please explain.
- e. Please explain why HECO did not eliminate or otherwise normalize these one-time consulting charges when assembling its 2007 rate case test year forecast.

CA-IR-273

Ref: HECO T-10 Response to CA-IR-2, Attachment 13, page 10 (ITS Costs).

Note B on the referenced document indicates that the 2007 test year forecast of \$1,627,550 was based on prior year actuals plus \$509,000 for main frame managed services (\$509k), Oracle maintenance (\$200k) and 2nd year Oracle maintenance (\$94k).

Please provide the following:

- a. Please provide a breakdown of the prior year actuals between materials, outside services and other.
- b. Referring to part a. above, please provide a further breakdown of the prior year outside services cost by expected consulting work scope required in the 2007 forecast year.

Ref: HECO T-10 Response to CA-IR-2, Attachment 13, page 10 (ITS Costs).

Note B on the referenced document indicates that the 2007 test year forecast of \$1,627,550 was based on prior year actuals plus \$509,000 for mainframe managed services (\$215k), Oracle maintenance (\$200k) and 2nd year Oracle maintenance (\$94k).

Please provide the following:

- a. Please confirm that the \$215,000 for managed services is associated with temporary services for mainframe support while HECO migrates to the Unix/Oracle platform. If this cannot be confirmed, please explain.
 1. Please explain why it was necessary for HECO to retain the temporary services referenced in part a. above.
 2. Does HECO expect to retain temporary mainframe support services on an annually recurring basis subsequent to 2007? Please explain.
 3. Please explain why HECO believes that these temporary services are properly included in the 2007 test year forecast.
- b. Please provide a breakdown of and forecast support for the \$200,000 of Oracle maintenance fees in 2007.

1. Referring to part b. above, please explain why it was necessary for HECO to incur Oracle maintenance fees in 2007.
 2. Referring to part b. above, are any of the components of the \$200,000 one-time, non-recurring or start-up fees? Please explain.
 3. Does HECO expect to incur \$200,000 of Oracle maintenance fees on an annually recurring basis? Please explain.
- c. Please provide a breakdown of and forecast support for the \$94,000 of 2nd year Oracle maintenance fees.
1. Why did HECO include the second year of Oracle maintenance fees in the 2007 test year forecast along with the \$200,000 of Oracle maintenance fees referenced in part b. above?
 2. Does HECO expect to incur \$94,000 of Oracle maintenance fees on an annually recurring basis? Please explain.
- d. Referring to parts a, b and c above, please provide a calculation of the portion of the mainframe managed services (\$215k), Oracle maintenance (\$200k) and 2nd year Oracle maintenance (\$94k) costs distributed to O&M.

expense through the 2007 test year clearing distribution process.

CA-IR-275

Ref: HECO T-10 Response to CA-IR-2, Attachment 13, page 10 (ITS Costs).

Note D on the referenced document indicates that the 2007 test year forecast of \$384,000 of miscellaneous work order amounts was based on prior year actuals plus \$332,000 for enterprise software maintenance (\$190k) and additional third party software maintenance (\$142k). Please provide the following:

- a. Please provide a breakdown of and forecast support for the \$190,000 of enterprise software maintenance fees in 2007.
 1. Referring to part a. above, please explain why it was necessary for HECO to incur the enterprise software maintenance fees in 2007.
 2. Referring to part a. above, are any of the components of the \$190,000 enterprise software maintenance fees one-time or non-recurring? Please explain.
 3. Does HECO expect to incur \$190,000 of enterprise software maintenance fees on an annually recurring basis? Please explain.
- b. Please provide a breakdown of and forecast support for the \$142,000 of additional third party software maintenance fees in 2007.

1. Referring to part b. above, please explain why it was necessary for HECO to incur the additional third party software maintenance fees in 2007.
 2. Referring to part b. above, are any of the components of the \$142,000 additional third party software maintenance fees one-time or non-recurring? Please explain.
 3. Does HECO expect to incur \$142,000 of additional third party software maintenance fees on an annually recurring basis? Please explain.
- c. Referring to parts a. and b. above, please provide a calculation of the portion of the enterprise software maintenance (\$190k) and additional third party software maintenance (\$142k) fees distributed to O&M expense through the 2007 test year clearing distribution process.

CA-IR-276

Ref: HECO T-10 Response to CA-IR-2, Attachment 13, page 11 (ITS Costs).

Note I on the referenced document indicates that the 2007 test year forecast of \$1,726,000 of consultant applications work order amount was based on prior year actuals plus \$926,000 for CIS application outsourced charges (\$450k), HRMS application outsourced charges (\$116k), and additional TYC outsourced

charges to support legacy CIS (\$360k). Please provide the following:

a. Please provide a breakdown of and forecast support for the \$450,000 of CIS application outsourced charges in 2007.

1. Referring to part a. above, please explain why it was necessary for HECO to incur the CIS application outsourced charges in 2007.
2. Referring to part a. above, are any of the components of the \$450,000 CIS application outsourced charges one-time or non-recurring? Please explain.
3. Does HECO expect to incur \$450,000 of CIS application outsourced charges on an annually recurring basis? Please explain.

b. Please provide a breakdown of and forecast support for the \$116,000 of HRMS application outsourced charges in 2007.

1. Referring to part b. above, please explain why it was necessary for HECO to incur the HRMS application outsourced charges in 2007.
2. Referring to part b. above, are any of the components of the \$116,000 HRMS application outsourced charges one-time or non-recurring? Please explain.

3. Does HECO expect to incur \$116,000 of HRMS application outsourced charges on an annually recurring basis? Please explain.
- c. Please provide a breakdown of and forecast support for the \$360,000 of additional TYC outsourced charges to support legacy CIS in 2007.
1. Referring to part c. above, please explain why it was necessary for HECO to incur the additional TYC outsourced charges to support legacy CIS in 2007.
 2. Referring to part c. above, are any of the components of the \$360,000 additional TYC outsourced charges to support legacy CIS one-time or non-recurring? Please explain.
 3. Does HECO expect to incur \$360,000 of additional TYC outsourced charges to support legacy CIS on an annually recurring basis? Please explain.
- d. Referring to parts a, b and c above, please provide a calculation of the portion of the CIS application outsourced charges (\$450k), HRMS application outsourced charges (\$116k), and additional TYC outsourced charges to support legacy CIS (\$360k) distributed to O&M expense through the 2007 test year clearing distribution process.

Ref: HECO T-10, page 21 (Ellipse Migration).

Beginning at line 11 of page 21, HECO T-10 describes the \$509,000 cost related to the Ellipse migration to the Unix platform.

Please provide the following:

- a. Absent plans to operate on a new standard Unix/Oracle platform instead of the IBM mainframe platform, would it have been necessary for the Company to incur the \$509,000 of migration cost in 2007? Please explain.
- b. Please confirm that the migration process will result in both the IBM mainframe platform and the new standard Unix/Oracle platform to be fully maintained and in operation for a period of time. If this cannot be confirmed, please explain.
- c. Does the 2007 test year forecast include any O&M expenses (e.g., maintenance fees, licensing fees, user fees, etc.) associated with continued operations on the IBM mainframe platform? If so, please provide a detailed, descriptive listing of such items and related amounts included in test year expense.
- d. Other than the \$509,000 of migration costs, does the 2007 test year forecast include any O&M expenses (e.g., maintenance fees, licensing fees, user fees, etc.) associated with the new standard Unix/Oracle mainframe

platform? If so, please provide a detailed, descriptive listing of such items and related amounts included in test year expense.

- e. Once the migration is complete, how does the annual cost of the new standard Unix/Oracle mainframe platform compare with the annual cost of the IBM mainframe platform? Please explain and provide supporting cost documentation.
- f. Why did HECO choose not to normalize the \$509,000 for ratemaking purposes? Please explain.

CA-IR-278

Ref: HECO T-10, pages 21-22 (Ellipse Migration).

Beginning at line 11 of page 21, HECO T-10 describes the \$509,000 cost related to the Ellipse migration to the Unix platform.

Please provide the following:

- a. In preparing the 2007 test year forecast, when did HECO assume the migration work would commence? Please explain.
- b. When did the actual migration work commence? Please explain.
- c. Please provide HECO's current best estimate of the timetable for completing the following tasks:

1. Replacement of Access with the new Customer Information System, which HECO T-10 indicates was scheduled in early 2008.
 2. Replacement of Tesseract with the HR Suite project, which HECO T-10 indicates was planned in 2007.
 3. Completion of the migration of the Ellipse application and associated interfaces from the IBM/DB2 mainframe platform to the standard Unix/Oracle platform.
- d. At page 22, HECO T-10 indicates that the planned migration will improve vendor support because Mincom's support staff has experience with the Unix/Oracle platform, but not the mainframe or DB2, and the Ellipse application will not need to be converted to IBM/DB2 going forward. Once the migration is completed, does HECO anticipate that cost savings or reductions or improved efficiencies will be realized? Please explain.

CA-IR-279

Ref: HECO T-10, page 10 & CA-IR-131 (Account 920).

The table at page 10 reflects a historical comparison of charges to Account 920 gross and net of incentive compensation pay (PIC). CA-IR-131 provided the actual charges to Account 920 of \$13,506,000. Please provide the following:

- a. Please provide the actual 2006 PIC that should be deducted from the \$13,506,000 to be consistent with the data for other years included in the referenced table.
- b. Please identify and describe the primary factors and related amounts that caused Account 920 in 2006 (\$13.5 million) to be about \$2.2 million less than 2005 actual (\$15.76 million) and about \$4.7 million less than the \$18.2 million included in the 2007 test year forecast.

CA-IR-280

Ref: HECO T-10, page 16 & CA-IR-131 (Account 921).

The table at page 16 reflects a historical comparison of charges to Account 921 gross and net of Apprise amortization and incentive compensation pay (PIC). CA-IR-131 provided the actual charges to Account 921 of \$11,529,000. Please provide the following:

- a. Please provide the actual 2006 Apprise amortization and PIC amounts that should be deducted from the \$11,529,000 amount to be consistent with the data for other years included in the referenced table.
- b. Please identify and describe the primary factors and related amounts that caused Account 921 in 2006 (\$11.5 million) to be about \$2.7 million less than the 2005 actual (\$14.27 million) and about \$1.4 million less than the \$12.9 million included in the 2007 test year forecast.

- c. Please explain why the PIC exclusion for 2007 is shown as \$214,000 rather than the \$452,000 referenced at page 13, line 23.

CA-IR-281

Ref: HECO T-10 (AFUDC, CIAC & PHFFU).

During an informal interview on May 4, 2007, the subject of AFUDC was discussed including the interaction with CIAC and Property Held for Future Use ("PHFFU"). Please provide the following:

- a. Please confirm that no AFUDC is capitalized on any PHFFU amounts included in rate base. Once the related project is completed and placed in service, any amounts in PHFFU are transferred directly into the appropriate plant account without any AFUDC capitalization. If this cannot be confirmed, please explain.
- b. With regard to CIAC, reference was made to revised procedures resulting from a 2002 docket. Because CIAC billed to a particular party cannot be matched to a specific project through the accounting system, AFUDC was previously recorded on 100% of the construction expenditures, regardless of receipt of third party payments. Now, AFUDC is not started on a particular project that has associated CIAC until cumulative expenditures exceed the contribution amount. Then, AFUDC is capitalized on the

entire project expenditure balance for the remainder of the project. Please confirm or correct/revise the above discussion, as necessary and appropriate.

- c. Referring to part b. above, it appears that timing and matching may remain a problem. Once cumulative project expenditures exceed related CIAC collections, the Company commences capitalizing AFUDC on the entire amount of cumulative expenditures, not just the excess over CIAC (or customer advances for that matter). Please explain why the Company did not implement or is unable to implement either of the following methodologies to better determine the out-of-pocket expenditures on which AFUDC is capitalized:

1. Reduce the cumulative project expenditures, on which AFUDC is recorded, by the amount of collected CIAC (or customer advances) for the entire duration of the project.
2. Record negative AFUDC on the amount of collected CIAC (or customer advance) starting with receipt of the funds and stopping with the completion of the related construction project, which would serve to offset any excessive AFUDC charged as a project cost.

CA-IR-282

Ref: HECO T-10, pages 18-21 & HECO-1007 (HEI Billings).

At page 19, HECO T-10 refers to the Arthur Andersen billing methodology developed in 1992 while HECO-1007 indicates that 2006 allocation factors were used to quantify HECO's share of HEI Billings included in the 2007 test year. Please provide the following:

- a. Please provide the allocation study update relied upon to develop the various allocation factors applied on HECO-1007, including all workpapers and documentation showing the derivation of the allocation factors. [Note: Since MECO has a rate case pending at the present time, the requested information should also show development of the MECO factors.]
- b. Please specify whether the 2006 allocation factors are based on 2005 or 2006 operating and/or statistical data.
- c. With regard to HECO-1007, please provide comparable documentation showing any activity codes, related descriptions and amounts for any items not billed to the operating companies, but instead retained by HEI.

CA-IR-283

Ref: HECO T-10, pages 22-23 & HECO-1011 (Admin. Exp. Transferred).

Beginning at page 22, HECO T-10 generally discusses the methodology underlying Account 922 to transfer charges in

Accounts 920 and 921 to construction, affiliates or third parties. HECO-1011 also refers to an updated KPMG Study. Please provide the following:

- a. Please provide the allocation study update relied upon to develop the various allocation factors applied on HECO-1011, including all workpapers and documentation showing the derivation of the allocation factors. [Note: Since MECO has a rate case pending at the present time, the requested information should also show development of any factors relevant to and used by MECO.]
- b. Please specify whether the updated KMPG study allocation factors are based on 2005 or 2006 operating and/or statistical data.

CA-IR-284

Ref: HECO T-10, pages 42-45 (Standard Labor Rates).

The referenced testimony generally discusses the use of standard labor rates by HECO, using 2005 information adjusted to reflect overtime and wage rate changes consistent with the 2007 test year forecast. Please provide the following:

- a. Please provide a listing of the standard labor rates, by labor class, input into Pillar for purposes of preparing the 2007 budget.

- b. Are the standard labor rates, by labor class, used by the Company in preparing the 2007 test year forecast different from the standard labor rates input into Pillar for preparing the 2007 budget?
1. If so, please provide a listing of the standard labor rates, by labor class, input into Pillar for purposes of preparing the 2007 test year forecast.
 2. Please identify and describe the various changes between the standard labor rates used for 2007 general budgeting purposes and 2007 rate case test year purposes.
- c. Please provide a listing of the standard labor rates, by labor class, actually used by HECO in calendar 2005.
- d. Please confirm that the standard labor rates used for 2007 test year purposes were based on labor hours and payroll dollars for calendar year 2005, which then were adjusted to reflect changes in wage rates and overtime levels through 2007. If this cannot be confirmed, please explain.
- e. Referring to subpart d. above, please provide a copy of the source documentation supporting the 2005 labor hours and payroll dollars, by labor class.

Ref: HECO T-10, pages 42-45 (Standard Labor Rates).

The referenced testimony generally discusses the use of standard labor rates by HECO for accounting and budgeting purposes.

Please provide the following:

- a. Please provide the integrated electronic spreadsheet files (i.e., with cell formulae, workbook tabs and links to other files intact and not converted to values) and other supporting documents used in developing the standard labor rates (hours and dollars), by labor class, actually used by HECO in preparing the 2007 rate case test year forecast. Such documentation should support and clearly show how wage increases and overtime adjustments were considered in developing the standard labor rates, by labor class.
- b. In quantifying the Standard Labor Rates applied in the 2007 test year forecast, did HECO develop said rates by dividing actual 2005 regular and overtime pay (as adjusted for subsequent wage and salary increases) by actual 2005 productive hours? Please explain.
- c. Referring to subpart b. above, does the calculation of the standard labor rate exclude both nonproductive pay and hours from the numerator and denominator? Please explain.
- d. Referring to subpart c., please confirm that the calculated standard labor rate, based on productive pay and hours, is

also applied to nonproductive hours in the Company's 2007 test year forecast. If this cannot be confirmed, please explain.

CA-IR-286

Ref: HECO T-10, pages 54-56 & HECO-1019. (Abandoned Projects).

Referring to HECO-1019, please provide the most representative Project Initiation Authorization (PIA) or Project Identification Form (PIF) packet best describing the original planned project for each of the following abandoned projects:

- a. BP NAS Privatization: Y00004.
- b. ACD/IVR Project Reversal of Charge.

CA-IR-287

Ref: HECO T-10 (Financial Constraints).

During an informal interview on May 4, 2007, the subject of financial constraints in 2005 and 2006 was discussed. Please provide the following:

- a. Were any written documents prepared and distributed among upper management that were relied upon to conclude that HECO's (or HEI's) financial condition in 2005 was such that measures should be implemented to reduce costs and protect earnings? Please explain.

1. If so, please provide a copy of any such documentation, including both summary overviews and detailed analyses.
 2. If not, please specifically identify and describe what information was considered as part of the planning process.
- b. Were any written documents prepared and distributed among upper management that were relied upon to conclude that HECO's (or HEI's) financial condition in 2006 was such that measures should be implemented to reduce costs and protect earnings? Please explain.
1. If so, please provide a copy of any such documentation, including both summary overviews and detailed analyses.
 2. If not, please specifically identify and describe what information was considered as part of the planning process.
- c. Please explain how the decisions to reduce costs and protect earnings in both 2005 and 2006 was communicated throughout and implemented by the management organization.

- d. Referring to part c. above, please provide a copy of the information distributed throughout the management organization in both 2005 and 2006.

CA-IR-288

Ref: HECO T-10 Response to CA-IR-2, Attachment 26, page 2 (Outside Services-General).

The nonlabor input sheet for the Senior Vice President Public Affairs includes \$660,000 for outside services-general in the 2007 test year forecast for Account 921. Please provide the following:

- a. Please provide additional documentation showing how this forecast amount was quantified for inclusion in the 2007 test year forecast.
- b. Please provide comparable levels for outside services-general dating back to 2001?
- c. Please identify and describe the specific work scope anticipated for the \$660,000 outside services-general forecast amount.
- d. Referring to part c. above, how does the work scope anticipated in 2007 compare with prior years? Please explain.

CA-IR-289

Ref: HECO T-10 Response to CA-IR-2, Attachment 26, page 3 (Outside Services-General).

Referring to Attachment 26, page 3, Item 2, an additional amount (\$100,000) was forecast for specific services that may not be needed on an ongoing basis. Please provide the following:

- a. Has the Company incurred such costs in prior years? If so, how much?
- b. Does the Company anticipate the need to incur similar costs in 2008 through 2010? Please explain.

CA-IR-290

Ref: HECO T-10 Response to CA-IR-2, Attachment 28, page 2 (Consultants).

The nonlabor input sheet for the Vice President Corporate Excellence includes \$144,000 for "Consultant-Dr. P" and \$50,000 for "Other Consultants" in the 2007 test year forecast for Account 921. Please provide the following:

- a. Please provide additional documentation showing how these forecast amounts were quantified for inclusion in the 2007 test year forecast.
- b. How does the combined \$194,000 for consulting services compare to historical levels dating back to 2001?
- c. Please separately identify and describe the specific work scope anticipated for the \$194,000 and \$50,000 consulting services.

- d. Referring to part c. above, how do the work scopes anticipated in 2007 compare with prior years? Please explain.

CA-IR-291

Ref: HECO T-10 Response to CA-IR-2, Attachment 17, page 4 (Corporate Costs).

The nonlabor input sheet for the President's Office includes various corporate costs in the 2007 test year forecast for Account 921.

Please provide the following:

- a. Please explain the purpose of and provide additional documentation showing how each of the following forecast amounts was quantified for inclusion in the 2007 test year forecast:
1. Consultant Fees (\$142,180).
 2. Restricted Stock (\$51,566).
 3. Dividend-quarterly (\$175,704).
 4. Board Mtg. Retainer (\$124,070).
 5. Investor Relation (\$303,120).
 6. Stock Transfer (\$307,210).
 7. Reporting (\$579,360).
- b. How do the individual amounts, listed in part a. above, compare to historical levels dating back to 2001?
- c. Were all of the individual amounts, listed in part a. above, included in Account 921 for purposes of the 2007 test year

forecast? Please identify and describe any items specifically excluded from expense for ratemaking purposes.

Witness T-12 Ms. Price.

CA-IR-292

Ref: HECO T-12, pages 12 & 14 (NPPC).

The referenced testimony generally identifies and briefly discusses a \$4 million change in the NPPC component identified as "Amortization of (Gain)/Loss" which has been "attributed to asset losses and losses from an increase in liabilities for active participants and retirees." Please provide the following:

- a. Please provide additional documentation from the Company's actuary supporting the 2005 actual "amortization" of \$3,495,546.
- b. Please provide additional documentation from the Company's actuary supporting the 2006 actual "amortization" of \$7,935,663.
- c. Please provide additional documentation from the Company's actuary supporting the 2007 estimate "amortization" of \$7,525,000.

CA-IR-293

Ref: HECO T-12, pages 11 & 14 (NPPC).

The referenced testimony on page 14 indicates that "the increase in the Service Cost and Interest Cost components of approximately

\$4,500,000 is mainly due to an increase in active participants and retirees as well as the effects of inflation." Please provide the following:

- a. Please provide the number of active participants and retirees on which the 2005 actual service cost and interest cost was based.
- b. Please provide the number of active participants and retirees on which the 2007 estimated service cost and interest cost was based.
- c. Please quantify the portion of the increase of about \$4.5 million associated with the increase in active participants and retirees.

CA-IR-294

Ref: HECO T-12, pages 28-29 & Response to CA-IR-160 (Training).

Please provide the following information:

- a. Please describe the Voluntary Education Assistance ("VEA") program.
- b. Please provide copies of any VEA program information distributed to Company employees.
- c. Referring to Note (a) of CA-IR-160, page 2, please explain the basis for the temporary suspension of VEA from May-Dec 2003.

- d. Referring to Notes (c) and (d) of CA-IR-160, page 2, please identify and describe the key factors (e.g., specific financial constraints) that caused the Company to curtail corporate and executive training as well as external training/travel costs in 2006.
- e. Please provide documentation showing how the following 2007 forecast amounts were determined:
 - 1. VEA \$154,000.
 - 2. In-House Training \$52,700.

CA-IR-295

Ref: HECO T-12, pages 33-34 (HR Suite Project).

Please provide the following information:

- a. Please confirm that the HR Suite project has now been delayed into 2008. If this cannot be confirmed, please explain.
- b. Referring to the response to part a. above, please update and revise HECO-1218 and HECO-WP-1258 accordingly.

CA-IR-296

Ref: HECO T-12, pages 46-47 & HECO-1220 (Ho'okina Awards).

According to the referenced testimony, the Ho'okina awards program financial thresholds were not met in 2005 and the program was temporarily suspended in 2006 to manage expenses due to financial constraints. Please provide the following:

- a. Please identify and describe the specific financial thresholds that were not met in 2005, in both qualitative and quantitative terms.
- b. Please identify and describe the specific financial constraints that arose in 2006, in both qualitative and quantitative terms.

CA-IR-297

Ref: HECO T-12, page 47, HECO T-6, page 32, & Response to CA-IR-69 (Ho'okina & Targeted Compensation Program).

The response to CA-IR-69 indicates that an "Engineering Retention Program" was approved after the 2006 budget was completed and was partially funded by suspension of the Ho'okina program.

Please provide the following:

- a. Please provide a breakdown of the \$286,300 forecast for the engineering retention program by engineering position, indicating the appropriate RA.
- b. Please clarify whether the engineering retention program is in the form of a permanent increase in base engineering salaries or represents an annually renewable award.
- c. Are there any financial thresholds or other financial considerations that cause the engineering retention program to result in potentially variable annual payments?
- d. Since \$216,000 of the engineering retention program was partially funded by suspending the Ho'okina award program,

please clarify whether the Ho'okina program was temporarily suspended or permanently terminated.

- e. If the response to part d. above indicates that the suspension is temporary, please identify and describe the primary factors that would cause HECO to lift the suspension.

CA-IR-298

Ref: HECO-1206 (Long Term Disability).

Please provide supporting documentation showing the derivation of the average merit and bargaining unit salaries of \$76,598 and \$59,872, respectively.

Witness T-13 Mr. Tamashiro.

CA-IR-299

Ref: HECO T-13, pages 20-24 & HECO-1305 (Rent).

Referring to the list of existing leases set forth on HECO-1305, please provide the following:

- a. Please identify each building/floor that HECO entered into a new agreement or amendment to a pre-existing agreement to lease space subsequent to the Company's 2005 test year rate case.
- b. Please identify each building/floor and the amount of any expansion in the square footage leased subsequent to the Company's 2005 test year rate case.

- c. Referring to parts a. and b. above, please provide a copy of the lease agreement for each new or expanded area identified.

CA-IR-300

Ref: HECO T-13, page 26 (Ward Avenue Parking Repair).

Beginning at line 15, HECO T-13 indicates that the Company budgeted for four non-recurring preventative maintenance projects relating to the Ward Avenue parking structure totaling \$764,000. Some of this work had been scheduled in prior years, but was deferred due to budget constraints. Because not all of the projects may be completed in 2007, the Company has proposed a normalization adjustment and included one-half of the total cost, or \$382,000, in the 2007 test year forecast. Please provide the following:

- a. Please confirm that the above summary accurately reflects the referenced testimony. If this cannot be confirmed, please explain.
- b. Please provide a descriptive listing of the four projects, including the estimated cost of each project.
- c. Were any of the four projects anticipated and included in the 2005 rate case test year expense?
 1. If so, please identify which project(s) was (were) so included.

2. Please provide the amount of any expense included in the 2005 rate case test year for each project identified in response to part c.1. above.

Witness T-14 Ms. Chiojioji.

CA-IR-301

Ref: HECO T-14, page 6 (Resource Needs & O&M Expense).

In describing why more adjustments weren't made to test year O&M expense to reflect the fact that a significant number of positions would not be filled at the beginning of 2007, HECO T-14 stated: "The short answer is that that would result in a significant understatement of the O&M expenses expected for 2007, unless upward revisions also were made to reflect the additional overtime, contract services and temporary hires that would have to be incurred or added to accomplish the expected work load." Please provide the following:

- a. Please confirm that no documented studies or analyses were prepared by or for HECO T-14 to evaluate the relationship between changes in employee headcounts and overtime levels. If this cannot be confirmed, please explain.
- b. Please confirm that no documented studies or analyses were prepared by or for HECO T-14 to evaluate the relationship between changes in employee headcounts and

retention of contract services. If this cannot be confirmed, please explain.

- c. Please confirm that no documented studies or analyses were prepared by or for HECO T-14 to evaluate the relationship between changes in employee headcounts and retention of temporary hires. If this cannot be confirmed, please explain.
- d. Referring to parts a, b and c above, please provide a copy of all such studies relied upon in the preparation of the referenced testimony.
- e. Referring to parts a, b and c above, please provide a copy of all such studies even if not specifically relied upon in the preparation of the referenced testimony.

CA-IR-302

Ref: HECO T-14, page 8, HECO-WP-1401 & CA-IR-27 (Vacancies).

Page 24 of CA-IR-27 updates and revises the test year average headcounts set forth on HECO-WP-1401. At page 8, HECO T-14 generally describes the Job Vacancy Requisition ("JVR") which begins the recruitment process. Please provide the following:

- a. Referring to revised HECO-WP-1401 (CA-IR-27, p. 24), please provide the number of vacant positions in each HECO department as of May 10, 2007.

- b. Referring to part a. above, please identify the vacant positions by department that does not yet have an approved JVR as of May 10, 2007.
- c. If not overly burdensome, please provide a further breakdown of the vacant positions without JVRs, as supplied in part b. above, by RA and labor class.

Witness T-15 Mr. Okada.

CA-IR-303

Ref: HECO WP-1502, page 2 (AFUDC Debt).

In discussions with Company personnel, a calculation was provided reflecting "Adjustment to AFUDC" and excerpts from a financial model projection captioned, "CapX: Update – AFUDC/CIAC by func." Please provide the following:

- a. Explain the assumptions and procedures employed to develop the basic underlying financial forecast of CapX and related AFUDC.
- b. Provide a complete copy of all outputs from the financial model used to project AFUDC.
- c. Explain whether any different assumptions underlie the AFUDC projections in comparison to test year capital additions for rate base inclusion.
- d. Describe each "Adjustment to AFUDC" that was made to depart from the basic projections.

CA-IR-304

Ref: Response to CA-IR-165, page 2 (Section 199).

The "Allocated to Generation" column of the calculations prepared by HECO include an allocation of "Customer Accounts expense" and "Customer service" expense." Please explain the inclusion of these costs in the determination of estimated pretax income for generation activity and provide complete copies of all supporting documentation or Internal Revenue Code authority relied upon for same.

CA-IR-305

Ref: HECO-WP-1505, pages 6 and 9 (ADIT Adjustments for AFUDC in CWIP and TCI in CWIP).

Please explain why test year estimated federal and state deferred income tax reserve balances are reduced by amounts captioned "AFUDC in CWIP" and "TCI in CWIP" and provide complete copies of all supporting documentation or HPUC ratemaking authority relied upon for same.

CA-IR-306

Ref: HECO-WP-1505 (Estimated 2006 and 2007 Activity and Balances).

The referenced Company workpaper sets forth estimated timing difference activity and balances for 2006 and for 2007 to determine test year average deferred tax balances for rate base inclusion. Please provide the following:

- a. Please provide updated actual 2006 activity and year-end deferred tax balances by sub-account within a revised spreadsheet file that replaces the projected amounts.
- b. Within the same spreadsheet responsive to part (a) of this information request, please provide updated calculations of estimated 2007 activity and revised balance projections as of December 31, 2007.
- c. Explain the model used to estimate property-related deferred tax provisions and amortizations (activity) and provide copies of workpaper calculations supporting these amounts.
- d. If not supplied in response to part (c) above, please describe and illustrate how changes to the HECO-projected plant additions and retirements for the test year can be integrated into the estimated deferred tax activity to estimate impacts upon year-end deferred tax reserves.

Witness T-16 Mr. Morikami.

CA-IR-307

Ref: HECO Plant, CIAC & Advances Exhibits (Updates).

Please update the following exhibits to incorporate actual 2006 values and HECO's current best estimate for 2007, including supporting documentation:

- a. HECO-1601, HECO-1602 & HECO-1603 (Plant Additions).
- b. HECO-1606 (Property Held for Future Use).

- c. HECO-1608 (CIAC).
- d. HECO-1609 (Customer Advances).

CA-IR-308

Ref: HECO-WP-1601 (2007 Plant Additions).

Please provide a listing of HECO's current best estimate of plant addition projects expected to be completed and placed in service during 2007, including the following information:

- a. Project number and description.
- b. Actual cumulative expenditures at 12/31/05, if any.
- c. Actual project expenditures during 2006, if any.
- d. Projected project expenditures during 2007, if any.
- e. Projected completion date for each project.

CA-IR-309

Ref: HECO-WP-1601 (2006 Plant Additions).

Please provide a listing of the actual plant addition projects completed and placed in service during 2006, including the following information

- a. Project number and description.
- b. Actual cumulative expenditures at 12/31/05, if any.
- c. Actual project expenditures during 2006, if any.
- d. Any straggling expenditures during 2007, if any.
- e. Actual completion date for each project.

CA-IR-310

Ref: HECO-WP-1601 (2006 Plant Additions).

With regard to the projects that HECO's original filing expected to be completed and placed in service during 2006, please provide the following:

- a. Please identify each project that was subsequently cancelled or delayed.
- b. Referring to part a. above, please explain why each project was cancelled or delayed.

CA-IR-311

Ref: HECO-WP-1601 (2006 Plant Additions).

Did HECO complete and place in service any construction projects during 2006 which were not closed to plant in service as of December 31, 2006? If so, please provide the following:

- a. Project number and description.
- b. Actual cumulative expenditures on each completed project as of 12/31/06.
- c. The amount of any straggling expenditures made in 2007 for each project.
- d. The date on which HECO stopped accruing AFUDC on each identified project.
- e. The date on which HECO commenced recording depreciation expense on each identified project.

- f. An explanation as to why each identified project was not closed to plant in service as of 12/31/06.

CA-IR-312

Ref: HECO-WP-1601 (2006 Plant Additions, CIAC & Customer Advances).

For each project completed during 2006 that involve related CIAC or customer advances, please provide the following:

- a. Please provide each project number and description.
- b. Please provide the amount of any CIAC or customer advance associated with each project, indicating whether the amounts are actual or estimated values.
- c. Referring to part b. above, please provide the amount of any CIAC or customer advances actually collected and recorded as of 12/31/06.
- d. Referring to part b. above, please provide the amount of any CIAC or customer advances to be collected and recorded in 2007, indicating whether the identified amount has been collected or is yet to be collected in 2007.
- e. Referring to part b. above, please provide the amount of any CIAC or customer advances that are expected to be collected and recorded in 2008.

CA-IR-313

Ref: HECO-WP-1601 (2007 Plant Additions, CIAC & Customer Advances).

For each project completed or expected to be completed during 2007 that involve related CIAC or customer advances, please provide the following:

- a. Please provide each project number and description.
- b. Please provide the amount of any CIAC or customer advance associated with each project, indicating whether the amounts are actual or estimated values.
- c. Referring to part b. above, please provide the amount of any CIAC or customer advances actually collected and recorded as of 12/31/06.
- d. Referring to part b. above, please provide the amount of any CIAC or customer advances to be collected and recorded in 2007, indicating whether the identified amount has been collected or is yet to be collected in 2007.
- e. Referring to part b. above, please provide the amount of any CIAC or customer advances that are expected to be collected and recorded in 2008.

CA-IR-314

Ref: HECO-WP-1601, pages 4-6 (2007 Plant Additions).

The referenced Company original workpapers identify fourteen (14) construction projects expected to be completed during 2007 that

exceed \$1 million, including the cancelled Ward Photovoltaic project (P10001120). Please provide the following:

- a. For the thirteen (13) remaining projects, please provide the most current and complete Project Initiation Authorization (PIA) or Project Identification Form (PIF) packet.
- b. If the 13 projects include blanket projects, which require different authorization or documentation formats, please provide such information in lieu of the PIF/PIA documentation requested in part a. above.
- c. If the responses to parts a. and b. above do not contain project feasibility studies, cost savings estimates, estimated construction and project completion dates, identification of retirements or related costs of removal, please provide the following:
 1. Does HECO routinely prepare such information associated with each of the 13 projects in addition to the information requested in parts a. and b. above?
 2. If so, please provide such information for each of the 13 projects in addition to the information requested in parts a. and b. above.
 3. If not, please explain why such information is not routinely prepared and considered in conjunction with

the construction planning and project management process.

CA-IR-315

Ref: HECO-WP-1601, page 5 (2007 Plant Additions).

The referenced Company workpaper sets forth a \$3.5 million project (P10001120) originally estimated for completion in 2007, which is identified as the HECO PV Ward Project (i.e., the Ward Photovoltaic project). Please provide the following:

- a. Please confirm that this project has been cancelled, as a HECO owned plant addition, and is now contracted to be owned by a third party. If this cannot be confirmed, please explain.
- b. Please explain the basis for cancelling the project as a HECO owned project, instead becoming a third-party project, and provide a copy of any feasibility studies prepared by or for the Company in support of this change.
- c. Please identify the third party.
- d. Will (Has) HECO enter(ed) into a lease agreement with the third party for the Ward Photovoltaic project?
 1. If so, please provide a copy of the lease agreement.
 2. If not, please explain.

- e. If not supplied in response to part d. above, please indicate when the lease is expected to commence and quantify the impact thereof on the Company's 2007 forecast test year.

Witness T-20 Mr. Young.

CA-IR-316

Ref: HECO T-20, page 9, line 12 - (Customer Costs).

At page 9, Mr. Young states that certain distribution costs of distribution lines and transformers vary, "...with the number and location of customers." Please provide the following:

- a. Copies of all studies, workpapers, analyses and other information relied upon to formulate this opinion with respect to the HECO system.
- b. Explain which (if any) cost of service allocation factors employed by HECO provide for recognition of the "location of customers".
- c. Describe how distribution lines and transformers are configured to serve a high-rise residential condominium in contrast to a single-family subdivision and explain whether or not the Company's customer allocation factors applied to the customer component of distribution plant costs recognizes such differences.

Ref: HECO T-20, page 19 - (Inclining Block Rates).

At page 19, Mr. Young states, "The merits on an inclining block rate design include mitigation of rate impact on the smallest users of the system, pricing signals that encourage conservation, and assignment of a greater share of the cost increase to the larger users." Please provide the following information:

- a. Explain whether or not Mr. Young believes that any of these "merits" would also justify adopting an inclining block rate for Schedule G customers.
- b. Explain whether or not Mr. Young believes that any of these "merits" would also justify flattening the declining block energy rates within Schedule J or Schedule P and/or implementing inclining block rates to such customers.
- c. To what extent does Mr. Young believes that any of these "merits" would justify flattening the Schedule P demand charges and/or adopting an inclining block Schedule P demand charge.
- d. Are inclining block or declining block energy rates more consistent with HECO's calculated marginal cost of service?
- e. Are inclining block or declining block demand rates more consistent with HECO's calculated marginal cost of service?

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing **DIVISION OF CONSUMER ADVOCACY'S FIRST THROUGH FOURTH SUBMISSIONS OF INFORMATION REQUESTS** was duly served upon the following parties, by personal service, hand delivery, and/or U.S. mail, postage prepaid, and properly addressed pursuant to HAR § 6-61-21(d).

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